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It Can Be Done: 50% diversion achieved by 1993

A report to the Council of the Municipality of Metropolitan Toronto

Submitted by the Metro Waste Reduction Task Force

Printed on recycled paper

Metro Waste Reduction Task Force

Report to Metro Council

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Metro Waste Reduction Task Force

List of recommendations and summary of the Task Force program

This report sets forth a detailed plan for implementation of the five principles for waste reduction recommended to Metro Council by the It's Not Garbage Coalition in the spring of 1990. Those principles are:

. mandatory separation at source by all generators
. storage, instead of disposal, of potentially recyclable materials
. provision of necessary staffing and financial resources for waste reduction
. creation of a Metro Waste Reduction Office
. community-based siting of storage, recycling and composting facilities

The report was prepared by a Task Force made up of individuals from community groups, labour, industry, Metro staff and Metro Council. All of the recommendations in the report reflect a consensus of opinion amongst all Task Force members. The opinions in the report represent the Task Force consensus, but not necessarily the views of all affiliated bodies.

The recommendations made by the Task Force are as follows:

List of recommendations for implementing the five principles:

1. That Metropolitan Toronto Council make a commitment to diverting from disposal, through reduction, re-use and recycling, 50% of 1990 total municipal, industrial, commercial and institutional waste quantities by 1993.

The First Principle: Mandatory source separation

2. That Metro Council request that the provincial government amend the Metropolitan Toronto Act as set forth in the report of the Metropolitan Toronto Solicitor, November 27, 1991.

3. That Metro Council request that the provincial government take steps necessary to ensure the Act is amended no later than December 31, 1991.

4. That Metro Council enact a Waste Reduction By-law, to come into effect January 1, 1993, which provides for the following:

. mandatory separation by all generators of their waste stream into (1) food and yard wastes; (2) recyclable materials listed in the by-law, as follows - newsprint, corrugated cardboard, fine paper, metals, glass, metals, PET and polyolefin plastics; (3) garbage waste for disposal

. a method for adding to the list of materials which must be separated at source

. a prohibition on disposal of recyclable materials listed in the By-law
. registration of waste haulers with Metro

. registration with Metro of industrial and commercial generators which generate more than 200 tonnes of solid waste a year

5. That Metro Council ban from landfill disposal all materials listed in the Waste Reduction By-law for mandatory separation at source.

6. That Metro Council ban additional materials as they are added to the by-law mandatory separation list and that storage or recycling alternatives be provided for those materials.

7. That Metro Council request the province to put in place a regulation under the Environmental Protection Act prohibiting construction and operation of new municipal solid waste incineration facilities.

8. That Metro Council request the province to put in place a regulation under the Environmental Protection Act prohibiting the export of mixed solid waste from the province.

9. That Metro Council continue to encourage waste reduction, re-use and recycling by means of high disposal fees.

10. That Metro Council establish an enforcement department within the Metro Waste Reduction Office with the objective of ensuring full compliance with the requirements of the Waste Reduction By-law both at the point of collection and at the landfill; the "assistance" and the "enforcement" functions should be housed in two separate divisions.

11. That Metro Council institute a program whereby staff separate mixed wastes which are put out for collection and the generator is then charged for that service in the same manner that the City of Toronto charges for sidewalk snow clearing.

The Second Principle: Providing Storage Capacity

12. That Metro Council carry out a pilot program for storage of recyclable materials at an estimated cost of approximately $17.5 million and that a permanent storage program then be developed, based on experience gained in 1993.

13. That Metro Council investigate options for longer-term storage.

14. That Metro Council ensure that Official Plan, zoning and building code requirements for new buildings ensure necessary storage capacity is provided.

The Third Principle: Allocation of Sufficient Resources

15. That effective immediately waste reserve funds be used by Metro Council for no purpose other than Metro waste reduction capital and operating costs.

16. That Metro Council request the provincial government to confirm that revenues generated by existing Metro landfill capacity will not be used to finance the new provincial authority.

17. That Metro Council request the provincial government to ensure that legislation establishing the new provincial waste disposal authority will require transfers of funds from provincial disposal revenues to Metro, to be used only to fund waste reduction, re-use and recycling activities.

18. That Metro Council provide capital funding of up to $200 million for construction of compost and MRF facilities.

19. That Metro Council provide, beginning in 1993, annual operating funding of up to $250 million for the program outlined here, to be taken from disposal revenues and the waste reduction fund.

The Fourth Principle: Establishment of a Waste Reduction Office

20. That the Waste Reduction Office be situated in the Metro administrative structure in such a way as to ensure it's ability to fulfil this mandate.

21. That Metro Council ask the province to ensure that legislation establishing the new provincial waste disposal authority limits the mandate of the authority to selecting and operating the GTA landfills.

22. That a Metro Waste Reduction Office be created with the following mandate;

. policy development

. co-ordination of procurement

. public education, information and consultation

. ICI technical assistance

. waste reduction by-law enforcement

. operation of a recycling and composting program

. marketing

23. That Metro Council request the province, to assist in developing markets for recyclable materials, to phase in regulatory requirements for use of recyclable materials in manufacturing processes and to provide fiscal incentives for their use.

24. To assist in re-use programs of the MWRO, it is recommended that Metro request the province to phase in regulatory requirements that all beverages be sold only in re-usable containers.

The Fifth Principle: Community-based Siting of Facilities

25. That Metro Council adopt a three stream collection system - wet, dry and garbage - and planning of the waste reduction infrastructure be based on this approach.

26. That Metro Council request the province to immediately implement a "Permit By Rule" approvals system, with provision for public hearings, for compost and recycling facilities.

27. That Metro Council use a community-based approach to plan, design, site and construct compost and recycling facilities by 1993. That approach should include the following elements:

. each community must take primary responsibility for reducing or diverting 50% of its waste from disposal by January 1, 1993;

. each community must honour the waste management hierarchy by focussing first on methods of reducing the amounts of waste generated;

. small scale and local waste diversion methods of reduction, re-use and recycling, and small scale community composting facilities shall be exhausted before proposing larger scale inter-community facilities;

. for each community, waste reduction methods must be developed through consultation across the whole community;

. within each community, all sectors must be equally responsible for meeting waste diversion objectives, including apartment and single family dwelling residents, commercial enterprises, institutions, and industry.

. Metro should provide necessary financial resources to community steering committees to hire staff where necessary for community planning;

. although the over-all Metro-wide plan for a waste diversion infrastructure should be co-ordinated and approved at the Metro level, it must be based as far as possible on the plans developed by each community;

28. That Metro Council continue to use the SWEAP siting process for the three facilities presently in the planning stages and use the community-based approach for all other 3Rs facilities.

29. That Metro and the province explicitly and publicly address and make decisions on the issue of private and public roles in waste recycling and adopt an explicit policy; that Metro Council create a study group, with representatives from citizen groups, labour, industry and the environmental community, to provide by December 31, 1991 suggestions on public and private roles; and that the study group also consider legal issues related to community-based siting.

Summary of the Task Force program

If implemented during 1991 and 1992, the plan would provide for a Metro-operated compost and recycling program capable of marketing approximately 1,300,000 tonnes of used materials each year. This would represent a diversion of approximately half of the Metro waste which went to disposal in 1990.

The major elements of the plan are summarized below. The summary follows the sequence of steps from initial generation of waste through to delivery of recyclable materials to the buyer and then concludes with a brief discussion of the proposed administrative structure (the Metro Waste Reduction Office) and estimated capital and operating costs of the program.

Waste generation

All Metro citizens, including both those in single-home and multi-unit residential dwellings and all commercial, industrial and institutional establishments, would be required by a Metro Waste Reduction By-law to separate their waste into three streams, as follows:

1. wet - food and yard waste for either backyard composting or collection and delivery to compost facilities.

2. dry, recyclable materials - specifically, newsprint, fine paper, non-contaminated wood, corrugated cardboard, metals, glass and PET and polyolefin plastics, (and other materials as facilities, markets or storage become available for them) for collection and transport to sorting, storage and recycling facilities.

3. mixed waste - the remaining garbage waste, for collection and transport to landfill disposal. (Although the Task Force was not able to address the issue, further separation of recyclable materials from the mixed waste stream might be possible).

Legislative authority for the Metro By-law would be obtained through an amendment by the provincial legislature of the Metropolitan Toronto Act.

It is estimated that the annual quantity of materials separated at source by the generators would be in excess of 1.5 million tonnes.

Collection

All collection agencies would provide bins to accommodate the three streams from each source. Collection agencies would be required, by the proposed Metro Waste Reduction By-law, to transport recyclable materials, defined as including compostables, only to a recycling facility and not to disposal.

Compliance with the Metro By-law source separation requirements would be ensured at the point of collection by the enforcement division of the new Metro Waste Reduction Office.

Processing of recyclable materials

Sorting would be done at Metro-owned and operated MRF facilities, to be established in accordance with the community siting and waste reduction principles outlined below.

Some materials might also go to privately owned sorting facilities.

It is assumed that sorting and composting would achieve 80% recovery, at a minimum, and therefore, some 1.3 million tonnes of material would go to compost and recycling with the residue going to landfill disposal.

Composting

As the most efficient means of composting, all single family homes in Metro would be given the opportunity to buy home composting units at less than market price.

It is estimated that 390,000 tonnes of residential and ICI food and yard wastes are potentially available for composting Of that, it is assumed that something like 50,000 to 100,000 tonnes per year could be diverted from disposal through home composting.

A collection service would be offered as an alternative for residential generators who did not wish to compost themselves and all other generators. Metro-owned and operated centralized composting facilities capable of accommodating the remainder would be established, following the community-based principles outlined below. Compost would then be provided as a soil conditioner for a number of uses, the major one being agriculture.

Storage of recyclable materials

It is suggested that Metro undertake a pilot project in 1993, using leased warehouse space and property, to provide for "inventory" storage of processed materials prior to their transport to market.

Metro would provide leased warehouse storage capacity, with adequate security precautions for both fire and environmental and health threats, in 1993 for the following materials:

indoor secure space - newsprint, fine paper and occ	207,000 tonnes
outdoor space, secure and covered - glass, metal, plastics	32,500 tonnes

Cost in 1993 of this storage capacity is expected to be approximately $17.5

million.

Based on experience in 1993, a permanent program, probably using Metro-owned space, would be developed.

It is further suggested that Metro investigate cost and feasibility of longer-term storage of materials for which there is not yet a recycling market.

Marketing and transportation

A marketing and delivery program capable of accommodating the expected volume of approximately 1.3 million tonnes per year would be operated by the Metro Waste Reduction Office. It would have three primary components:

- working with other governments to expand markets for recyclable materials through regulatory and fiscal measures
- stimulating consumer demand
- actively seeking out markets on a continental and global basis

The success of this marketing program is critical for the entire program. The quantity of materials put out to market will increase from something like 150,000 tonnes in 1990 to almost 10 times that amount in 1993. Although some storage capacity will be provided, if markets are not available the bulk of that material will have to go to disposal.

Disposal of remaining garbage

Metro would dispose of the remaining garbage, which in 1993 would be approximately half of the 1990 volumes and which would be reduced each year after that as reduction and re-use programs, offered by the province, Metro and area municipalities, became more successful. Existing Metro landfill capacity would be used until it was exhausted. After that, disposal would be in the new GTA landfill to be established by the provincial disposal authority. Compliance with the Metro By-law source separation requirements would be ensured by the enforcement division of the new Metro Waste Reduction Office at the point of separation, at recycling facilities and at the landfill. When disposal is being done at the new GTA landfill, enforcement could continue to be carried out by Metro or by MOE.

The Metro Waste Reduction Office

The MWRO would perform the following functions:

1. operation of reduction and re-use programs, through public education, assistance to generators, liaison with provincial and other bodies and other means

2. operation of an enforcement program

3. operation of the recycling program outlined above - sorting, storage, marketing and delivery of materials

4. operation of a compost program

5. policy development

6. public information and education; technical assistance to the ICI sector

7. assist the community-based siting process

Community based siting and waste management

All area municipalities and communities in Metro would be expected to contribute in some fashion to the Metro program. Composting, sorting and storage facilities would be planned, sited and operated through close liaison with community groups. Thus a decision on number of facilities or potential locations would not be made by Metro until after such consultation. Since sites for these facilities would have to be chosen, approvals obtained and construction completed within 18 months, consultation would be carried out in accordance with specified time-frames. MOE approvals would be on the basis of "permit by rule" rather than an EPA Certificate, but provision would be assured for an EPA-type public hearing before the Environmental Assessment Board if required.

Cost and sources of revenue

Waste reduction, re-use and recycling efforts should not be funded from tax revenues, but instead from waste disposal revenues. Metro should decide immediately that existing disposal revenues will only be used for this and the provincial government should make a commitment that future disposal revenues generated by Metro waste, once the new GTA landfill is in operation, will be turned over to Metro to use for this purpose.

The capital cost of the program recommended here is estimated to be up to $200 million.
The annual operating cost is estimated to be up to $250 million.

Both the capital and operating costs can be funded through waste disposal revenues.

Time-table for the Task Force 50% Diversion Plan

July 1991	Task Force Plan adopted by Metro Council
	Metro Act amendment request submitted to Province
	Planning and community-siting process initiated
	Planning for Metro Waste Reduction Office begins
Dec. 31, 1991	Metro Act amended
	Metro adopts Waste Reduction By-law, effective Jan. 1, 1993; begins information campaign on source separation requirements
	Metro Waste Reduction Office opens
	Work begins on Metro-wide facilities plan, based on community plans
July 1, 1992	Metro Applies to MOE for approval of compost and recycling facilities
	Permit by rule Approvals given for facilities for which no hearings required
	Construction begins for those facilities
	EPA hearings for other facilities begin
Jan. 1, 1993	Metro Waste Reduction By-law comes into effect; all generators separate at source
	Hearings approvals given; construction begins
	Storage space leased
	50% diversion program begins

Storage space leased

50% diversion program begins

Part A. Background

1. Introduction

The opportunity

During the past few years, progress has been made on waste reduction in Metropolitan Toronto. Now, in the spring of 1991, Metro and its partners in waste reduction - the province, area municipalities, private sector waste generators and management firms, environmental groups and local communities - are presented with an historic window of opportunity. During the next 18 month period from July 1, 1991 to December 31, 1992, it is possible, if all sectors work together to facilitate decision-making and program implementation - to reduce or divert to recycling at least half of the Metro waste now going to landfill disposal.

It can be done.

This opportunity exists because:

- Metro citizens and community groups have indicated they are ready to move to the next stage beyond Blue Box recycling

- commercial and industrial generators are putting in place recycling measures

- there is now a genuine commitment to waste reduction on the part of the Metro Works Department, Works Committee and Council

- the Ontario government, as shown by the Minister's statement of February 21, 1991, is now planning, for virtually the first time, to use regulatory requirements for waste reduction, re-use and recycling

. private sector waste management firms are putting in place reduction and recycling alternatives for their customers who wish to avoid the $150 per tonne 1991 tipping fee

This report sets out a plan for achievement of that goal. Based on regulatory requirements that all generators separate recyclable or compostable materials from their waste stream, and with provision of adequate financial and human resources, Metro can reduce its waste going to landfill by 50%, beginning in 1993.

Background

In the spring of 1990 the It's Not Garbage Coalition, representing environmental, labour and local citizen organizations, recommended that Metro adopt and implement the following five principles for waste reduction:

. mandatory separation at source by all generators
. storage, instead of disposal, of potentially recyclable materials
. provision of necessary staffing and financial resources for waste reduction
. creation of a Metro Waste Reduction Office
. community-based siting of storage, recycling and composting facilities

The Waste Reduction Task Force was created by Metro Council on July 4, 1990 with a mandate to study and report to Metro Council on the means of implementing these principles. The Task Force is an independent body with representatives from the Coalition, the OWMA, CUPE, Metro Works, Metro Council and other bodies. The Task Force membership is listed in Appendix 1. The views expressed in this report represent a consensus of opinion amongst Task Force members but do not necessarily represent the views of any of the bodies involved with the process.

Format

The purpose of this report is to provide both detailed recommendations and plans for implementation of the five principles. The scope of the report is limited to solid waste reduction, re-use and recycling and does not include disposal options.

The report is divided into four parts, as follows:

Part A. Background: provides, first, a summary over-view of the roles and responsibilities of all actors and progress made to date in Metro on solid waste diversion from landfill, and, secondly, an estimate of the quantities of different materials which must be diverted to recycling to achieve the goal of 50% diversion by January 1, 1993.

Part B.The Five Principles: provides recommendations for implementation of each of the five principles in the It's Not Garbage Action Agenda.

Part C. Resolving an essential issue: sets forth pros and cons of an important issue which, while beyond the mandate of this Task Force, must be addressed by all those involved with waste reduction - the roles of the public and private sectors in solid waste recycling.

Part D. Action Plan: provides a time-table for implementing the program recommended in this report.

2. Task Force Objective

It is a truism to say that Metro Toronto, and all other Ontario municipalities, must drastically reduce the quantities of solid waste they generate each year. This is only in part because of the pollution caused by waste disposal, either groundwater contamination caused by landfill disposal or air pollution from incineration. A far more important reason is the unsustainable quantity of resources consumed each year by our wasteful society.

This can only be done if we change our basic perspective on waste. This change in perspective is set out in the following extract from the It's Not Garbage Coalition position:

"It's not garbage if we can find ways to re-use, recycle or compost what we now just throw out. ... It's not Garbage represents an informal but broadly based coalition ... working together to advocate the Agenda as the best way to reduce Metro Toronto's solid waste. ... We are committed to taking responsibility for our own waste."

What follows is a brief elucidation of the five principles which form the basis for the Task Force report.

. mandatory source separation all generators:

The waste management hierarchy requires that waste be managed first by reduction (not generating waste in the first place); secondly by re-use (for instance, refilling a beverage container, instead of recycling it or throwing it away) and thirdly by recycling (using the waste as raw material for creation of a new product - composting is referred to as a recycling option). Only materials which cannot be reduced, re-used or recycled are then disposed of.

The task force recommends that Metro continue with programs such as disposal pricing which provide an incentive for not generating waste in the first place. The primary component of the plan recommended here, however, is recycling of approximately half the waste now going to disposal.

The first step in such a program is separation of recyclable materials from the waste stream. This can be done in two ways, either through collection of unsorted waste, followed by centralized sorting operations, or through separation by the generator (whether a household, business or government office) prior to collection.

The Task Force is committed to the principle of separation at source because it is in keeping with the principle that we must all take responsibility for our own waste. The garbage crisis will never solved until we get away from the "out of sight - out of mind" mentality which is perpetuated if somebody other than the generator does the sorting.

At present, source separation is done primarily on a voluntary basis by home-owners under the Blue Box program. But since residential waste accounts for only 39% of the total generated in Metro each year it is essential that all generators, including apartment dwellers, business, commercial establishments and institutions separate their wastes into three primary streams - food and yard wastes which can be composted, dry materials which can be recycled and the remaining portion which will go to landfill disposal.

The Blue Box program is based on voluntary participation. Voluntary programs, however, are both inefficient, since the participation rate will never be a full 100%, and inherently inequitable. It is not fair to ask one person, or business, to take action on behalf of all of us when the next-door neighbour, or business competitor, is under no compunction, other than moral suasion, to do the same thing. We use law to achieve all other social objectives, from traffic speeding, to hate literature to smoking in restaurants, and it must be used here if we are serious about waste reduction. As long as governments rely on voluntary programs they are sending out a message that waste reduction is something we should do but don't really have to do. When they pass and enforce laws they send out a message that this is something we, as a society, will do.

. storage:

Since recycling programs were initiated in the early 1970s, the major problem they have faced is fluctuating prices for recycled materials. Storage allows materials to be kept off the market, just as a manufacturer will reduce production at times of lessened demand, when prices are low. In addition, the principle of storage allows materials for which there is not yet a recycling option to kept, instead of being thrown away, until such a market develops.

At present, Metro stores some recyclable materials such as glass, metal, plastic and newsprint. Such storage is done on an ad hoc basis, as required, and storage capacity is very limited. What is needed is a permanent storage program which can provide needed capacity without any threat to human or ecological health.

. funding waste reduction:

Funds allocated by Metro and the area municipalities for waste 3Rs have traditionally been a small per centage of those allocated to collection and disposal. Now that Metro has changed its priorities, budget allocations must be changed accordingly.

In a report dated March 4, 1991, the Works Commissioner has provided information on changes in the portion of the capital and current waste management budgets devoted to 3Rs activities. In 1991 3Rs expenditures represent 64% of the waste capital budget and approximately 30% of the waste current budget. These expenditures will increase significantly if the Task Force program recommended here is implemented. To provide a direct incentive for waste reduction it is essential that disposal costs be charged back, as much as possible, to the generator and disposer and that the resulting revenues be used to fund waste reduction.

The Metro waste reduction program should not be funded from general tax revenues, since that undercuts the incentive for reduction. Fortunately, there is no need to do so, since capital and operating costs can be funded from disposal revenues.

. creation of a Metro Waste Reduction Office:

As the priority shifts from disposal to reduction, there is need for corresponding changes in the Metro administrative structure. It is essential to establish an office, department, or division which has (1) a mandate only for reduction, re-use and recycling activities and no responsibility for garbage transfer or disposal; and (2) a corporate-wide perspective and powers.

. community-based reduction facilities and projects:

We must draw on the talents and energies of all those who have been working at the community level for years to solve the garbage crisis. Local communities in Metro Toronto must be directly involved with the planning, siting and operation of community-scale recycling facilities.

There are two reasons for this. First, such involvement is in keeping with the principle of taking responsibility for our own waste. Secondly, traditional siting approaches, based on community consultation but without granting any real decision-making powers to affected citizens, have for the most part become bogged down in acrimony and opposition. Accordingly, the Task Force is recommending that Metro adopt the following community-siting principles:

. each Metro community should accept responsibility for reducing its own waste

. planning for Metro waste reduction facilities should be done in partnership with local communities; where necessary, funding for facilitators and other staff should be provided to communities

. facility approvals should be based on the new waste classifications and approvals process being developed by MOE but without eliminating the option of a public hearing

The Task Force recognises that the program recommended here is a significant departure from existing waste management practices, both here and in other jurisdictions. Requiring all generators to separate wastes at source, providing millions of cubic metres of storage capacity and using a new approvals process for siting facilities are all radical steps which would have been unthinkable even a few years ago.

Even more significant is the suggestion that a program of this size and scope be planned, developed and put in place within 18 months.

There may well be objections to a plan of this magnitude. Area municipalities may object to a "grab" of power by Metro, private waste management firms may object to unfair competition from government and some communities may object to local siting of facilities. Metro Council must listen carefully to all such objections and do everything possible to take them into account. At the end of the day, however, Metro must act.

We are in the midst of a garbage crisis, drowning in our own throw-aways and disposables. The only way out of crisis is leadership. Metro must show that leadership by putting in place a program for recycling at least half of the materials which we now throw away.

3. The context for Metro action

The purpose of this section is to provide an understanding of current Metro waste management activities. This overview of current waste management is the basis for the new system proposed by the Task Force, which is presented in Part B.

Because responsibility is divided, a description of current waste mangement must include activities not only of Metro but also of the other agencies with whom it shares waste management responsibilities - the area municipalities, which collect residential waste, private sector waste management firms, which collect commercial, industrial and institutional waste and the province, which regulates waste management. Ontario has now also assumed, with the Minister's statement of November 21, 1990, responsibility for siting and operating landfills for the disposal of waste from Metro, Peel, York and Durham. Thus responsibility for disposal of Metro waste will move from Metro to the new authority, once existing Metro capacity is exhausted.

Having described the current activities of all the players in this section, Section 4, following, provides an estimate of the quantities of different materials which must be recycled, beginning in 1993, to achieve the 50% reduction and diversion target.

Waste disposed of in 1990 - Metro Toronto only

In 1990 Metro Toronto disposed of 2,396,533 tonnes of solid waste. Of that total, 943,419 tonnes was residential and municipal waste, including apartments and light commercial collected by municipal works departments, and 1,453,114 tonnes was commercial and industrial wastes. Figure 1, following, shows this total broken down by area municipality.

Draft, May 16, 1991, Jeff Martin

FIGURE 1

METROPOLITAN TORONTO SOLID WASTE
GENERATION RATES
(1990)

METROPOLITAN TORONTO UNIT GENERATION AREA	1990 POPULATION	MUNICIPAL (1) SOLID WASTE GENERATED IN 1990 (TONNES)	MUNICIPAL SOLID WASTE GENERATION RATE (TONNES/ CAPITA/YEAR)	IND/COMM/INST (2) SOLID WASTE GENERATED IN 1990 (TONNES)	TOTAL SOLID WASTE GENERATED IN 1990 (TONNES)	TOTAL SOLID WASTE GENERATION RATE (TONNES/ CAPITA/YEAR)
EAST YORK	101,566	41,129	0.40	30,862	71,991	0.71
ETOBICOKE	309,144	131,426	0.43	300,081 (3)	431,508	1.40
NORTH YORK	571,820	194,555	0.34	300,103	494,658	0.87
SCARBOROUGH	505,469	189,417	0.37	221,996	411,413	0.81
TORONTO	627,975	323,330	0.51	565,628 (4)	888,958	1.42
YORK	137,979	63,562	0.46	34,443	98,005	0.71
METROPOLITAN TORONTO	2,253,953	943,419	0.42	1,453,114	2,396,533	1.06

SOURCE: WEIGHSCALE SOURCE AREA DECLARATIONS
METRO WORKS, SOLID WASTE MANAGEMENT DIVISION, 1990 ANNUAL REPORT.
METROPOLITAN TORONTO PLANNING DEPARTMENT

(1) MUNICIPAL SOLID WASTE IS DEFINED AS: RESIDENTIAL AND LIGHT COMMERCIAL WASTE COLLECTED BY MUNICIPAL FORCES, STREET SWEEPINGS, CATCH BASIN CLEANINGS, AND AREA MUNICIPALITY PARKS DEPARTMENT WASTES.

(2) INDUSTRIAL/COMMERCIAL/INSTITUTIONAL SOLID WASTE INCLUDES WASTE RECEIVED FROM METROPOLITAN TORONTO DEPARTMENTS, LOCAL BOARDS AND COMMISSIONS.

(3) INCLUDES 71,504 TONNES OF SEWAGE SLUDGE FROM METRO'S HUMBER SEWAGE TREATMENT PLANT

(4) INCLUDES 25,000 TONNES EXPORTED TO UNITED STATES

25

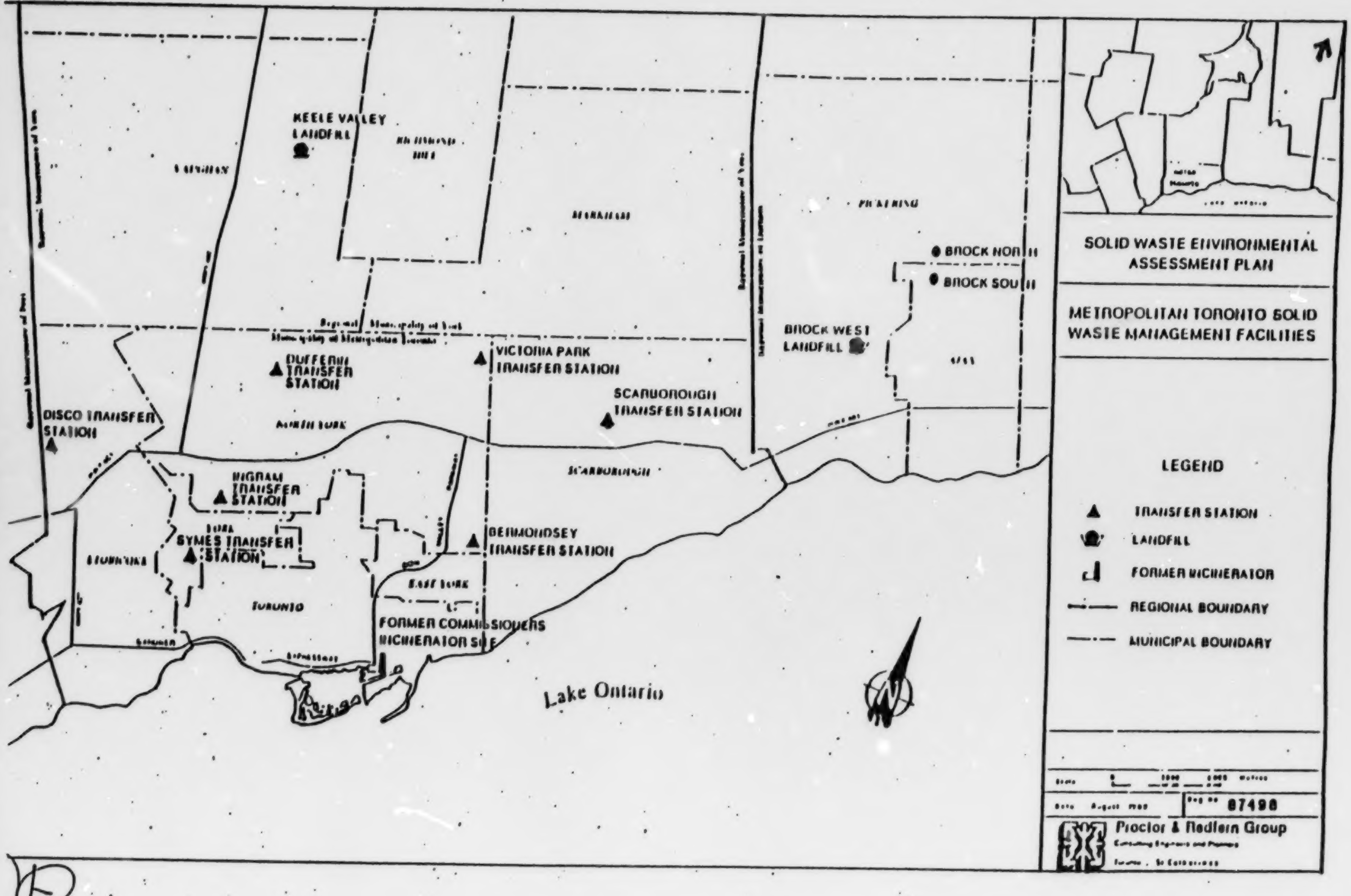
Waste disposed of by Metro Works Department in 1990 - Metro, Durham and York

Total disposed of: 3,111,132 tonnes, from the following sources

Metro	2,371,533 (discrepancy with above due to 25,000 export to U.S.)
Durham	293,208
York	426,080

These quantities of solid waste are managed by the Metropolitan Toronto Works Department. In 1990 the Department managed 2 landfills and 7 transfer stations, shown on Figure 2 following.

Figure 2


SOLID WASTE ENVIRONMENTAL ASSESSMENT PLAN
METROPOLITAN TORONTO SOLID WASTE MANAGEMENT FACILITIES
LEGEND
TRANSFER STATION
LANDFILL
FORMER INCINERATOR
REGIONAL BOUNDARY
MUNICIPAL BOUNDARY
KEELE VALLEY LANDFILL
RICHMOND HILL
MARKHAM
PICKERING
BROCK NORTH
BROCK SOUTH
BROCK WEST LANDFILL
AJAX
DUFFERIN TRANSFER STATION
VICTORIA PARK TRANSFER STATION
SCARBOROUGH TRANSFER STATION
DISCO TRANSFER STATION
NORTH YORK
SCARBOROUGH
INGRAM TRANSFER STATION
YORK
SYMES TRANSFER STATION
ETOBICOKE
BERMONDSEY TRANSFER STATION
EAST YORK
TORONTO
FORMER COMMISSIONERS INCINERATOR SITE
Lake Ontario
August 1988
87498
Proctor & Redfern Group

3.1 The Metro mandate for waste management

3.1.1 Legal Authority

Since its creation in 1954, the Municipality of Metropolitan Toronto has had statutory powers and responsibilities pertaining to waste management. In 1967, Metro took over all waste disposal responsibilities previously carried out by the area municipalities within Metro.

Metro's waste management powers are established under Part V of the Municipality of Metropolitan Toronto Act,RSO 1980 c. 314 as amended. Section 66(1) of the Act empowers Metro to:

> acquire and use land inside or outside Metro, and establish facilities, for the purpose of receiving and disposing of wastes;
>
> operate waste disposal facilities;
>
> contract with others to carry out waste disposal activities;
>
> prohibit or regulate waste disposal on lands acquired for such purposes; and;
>
> charge fees for waste disposal services depending on the class and volume or weight of waste or any other criteria.

The Act was amended in 1989 to allow Metro to charge fees for waste disposal to area municipalities. The Act prohibits area municipalities from carrying out any of the above listed activities without the approval of Metro.

Section 67 of the Act empowers Metro to establish and operate facilities for the "recovering, manufacturing, producing, supplying selling or distributing "of products, resources or other commodities derived from waste including energy from waste." For these purposes Metro can enter into private agreements,carry out studies,construct facilities, and acquire licences or patents.

It does not allow Metro to place any regulatory restrictions or requirements on the generation or handling of wastes. For example, while the existing laws allow Metro to ban certain types of recyclable waste from its facilities, it could not pass a by-law requiring generators to separate wastes at source, or reduce the amounts of waste generated.

In sum, the existing legislation does not give Metro sufficient powers to pursue an aggressive waste reduction program. In recognition of this deficiency Metro Council has asked the Metro Legal Department to draft amendments to the Metro Toronto Act which, if enacted by the Ontario Legislature, would give Metro expanded powers over waste management.

By a report to the Metro Works Committee, dated November 27, 1990, the Metro Solicitor set forth such possible amendments to the Metro Act. These are described in detail in Section 5.1 following.

Essentially, the potential amendments in the November 27 report would, if enacted, give Metro potential authority over all aspects of waste management in Metro Toronto. It would then be be up to Metro to decide which of these potential powers it would use, by enacting by-laws based upon the legislative authority of the amended Metro Act.

Metro Council has circulated the proposed amendments to the Metro Act to the area municipalities for comment. The Councils of Toronto, Scarborough, East York and North York have expressed their opposition to any such amendment of the Metro Act.

By report dated May 28, 1991, the Metro Works Commissioner has suggested changes to the proposed revisions to the Metro Act set out in the report of the Solicitor dated November 27, 1990. These suggested changes are described as "housekeeping" and are a result of discussions with various stakeholders.

Both the November 27, 1990 and May 28, 1991 reports are appended to this report as Appendix 2.

3.1.2 Metro SWEAP

The Metro Solid Waste Environmental Assessment Program was initiated in 1987 as the means of preparing a waste management master plan under the terms of the Ontario Environmental Assessment and Environmental Protection Acts.

On November 21, 1991, the Honourable Ruth Grier, Minister of Environment, announced that the Ontario government would "establish a new public sector authority" which would "search for and select a waste disposal site". In response to Metro's request for clarification of the relationship between the new Authority and the SWEAP process, the Minister stated, by letter dated, January 22, 1991, that Metro was to "cease the landfill site search under SWEAP" and to "continue the SWEAP waste management master plan process for non-landfill components."

The SWEAP Management Committee plans to release for public comment later in 1991 the proposed Metropolitan Toronto Solid Waste Management Master Plan. That plan will provide an evaluation of waste reduction, re-use, recycling, composting, incineration and landfill disposal and recommend an integrated system based on those components.

The Table of Contents for the SWEAP Management Master Plan, titled SWEAP Document 7.2 has been released for public comment, as have draft solid waste management policies, contained in a letter from Mr. David Schram, Procter and Redfern to Mr. Bill Crowther, Metro Works, dated March 12, 1991.

3.1.3 The Metro Waste Reduction Program

As can be seen from Figure 3, following, annual waste disposed of by Metro almost doubled in the period 1983 to 1987. In 1989 and 1990, however, Metro was able to reduce the quantity disposed of from the following year.

Metro Waste recycled in 1990

Metro received from the area municipalities in 1990 82,278 tonnes of Blue Box materials. This was made up of 55,220 tonnes of newspaper, 12, 267 tonnnes of glass and the remaining 14,790 was co-mingled materials.

In addition, 31, 696 tonnes of leaves and yard wastes, were diverted.The Metro Works Department has estimated, but cannot verify, that 91,500 tonnes of commercial, industrial, private sector and education wastes were also diverted from landfill.

Thus a total of 205,474 tonnes was diverted from landfill in 1990. This represents 8.5% of the 2,396,533 tonnes disposed of in 1990. Two points should be borne in mind:

. the 8.5% diversion uses 1990 as the base year, while the MOE target of 25% diversion is based on a 1987 base year

. the per centage would be lower if it were based on total waste generated (ie, 2,396,533 plus 205,474) instead of simply waste disposed of

Chronology

A chronology of waste reduction programs implemented by Metro over the past three years is as follows:

Draft, May 16, 1991, Jeff Martin

FIGURE 3

ANNUAL TOTAL SOLID WASTE RECEIVED FOR DISPOSAL AT METROPOLITAN TORONTO WORKS DEPARTMENT FACILITIES

YEAR	MUNICIPAL * SOLID WASTE COLLECTED FROM METRO	TOTAL SOLID ** WASTE RECEIVED FOR DISPOSAL
1977	876,251	1,860,471
1978	846,085	1,841,364
1979	867,497	1,821,135
1980	861,271	1,949,591
1981	872,046	1,942,141
1982	885,050	1,830,352
1983	872,943	1,851,914
1984	910,315	2,064,805
1985	946,984	2,484,605
1986	1,007,243	2,989,896
1987	1,000,022	3,250,703
1988	988,662	3,293,961
1989	975,386	3,220,300
1990	943,419	3,112,097

SOURCE: METRO WORKS, SOLID WASTE MANAGEMENT DIVISION ANNUAL REPORTS.

* MUNICIPAL SOLID WASTE IS DEFINED AS: RESIDENTIAL AND LIGHT COMMERCIAL WASTE COLLECTED BY MUNICIPAL FORCES, STREET SWEEPINGS, CATCH BASIN CLEANINGS, AND AREA MUNICIPALITY PARKS DEPARTMENT WASTE.

** TOTALS INCLUDE ASH FROM INCINERATION.

(32)

1988-89: area municipalities implement Blue Box program for single family residences

Oct, 1988: Metro Council approves design for 190-tonne-per-day composting plant; the plant is not yet in operation

Jan. 1989: Council approves Waste Reduction and Recycling Program, with a target of 30% reduction from 1987 by 1990

ban on corrugated cardboard

Feb., 1989 $3.1 million public education program

June, 1989 first steps toward leaf and yard waste collection for composting

July, 1989: 12,000 home composting units offered for sale at reduced price

Oct., 1989: tires banned for disposal at Keele landfill

Council approved pilot wet collection program for 11,000 households and 50-ton-per-day composting plant at Dufferin transfer stations; the program is not yet in operation

Jan., 1990: Council approved Blue Box sorting plant, to open May, 1991; the plant is not yet under construction

Sept., 1990: Council approved additional bans and disposal price increases, effective1991

Nov., 1990: potential drafts amendments to Metro Act submitted to Works Committee; circulated for comment, as discussed above

Feb., 1991: Commissioner recommends to Works Committee expenditure of approximately $50 million to build three plants:

. Material Recovery Facility for Construction/Demolition Waste
. Material Recovery Facility for Mixed Dry Waste
. Composting Plant for Industrial/Commercial Organic Waste

on the basis that each will produce less than 190 tonnes per day of residue for disposal, it was recommended that the Minister be asked to exempt the plants form EAA approval

By report dated March 4, 1991, to the Works Committee the Works Commissioner stated that the 1991 - 1995 Solid Waste Management Capital Expenditures provides for $214.3 million of expenditures on reduction and recycling. The facilities included in that budget are as follows:

". a material recovery facility (MRF) for blue box material;

. a MRF for the commercial dry waste stream;

. a pilot wet oranic residential collection program initially for 11,000 households, utilizing the existing digestor vessel at the Dufferin Resource Recovery Plant;

. a composting plant of approximately 190 tonnes per day [the Task Force assumes this refers to input and not residue but the report does not make this clear] for residential and commercial organic waste;

. a construction and demolition MRF;"

Evaluation of the 1989 Metro Waste Reduction Program

The December 16, 1988 report of the Commissioner set out 37 initiatives which were intended to achieve by 1990 a 30% reduction, measured against 1987 levels, in waste going to Metro disposal. Table 1 appended to that report set out diversion targets, in tonnes, for 20 different waste types and progams. The total of those targets was 990,000 tonnes, which represents a 30% diversion.

As set out above, total wastes diverted in 1990 were estimated to be 205,474 tonnes, considerably less than the target figure.

It would appear that those portions of the 1989 program which have been most succesfully implemented have been the bans and price increases, public education and home composting programs. Others, such as the sorting and composting plants and pilot wet collection program have fallen behind schedule.

The 8.5% 1990 diversion rate is well under the 30% target.

Metro is already on the way to implementing the type of large-scale reduction and recycling program recommended in this report by the Task Force. Three things are needed now:

. an expansion of Metro's legal authority over waste management

. willingness to take the plunge and provide the type of facilities infrastructure, outlined above, which has been in the planning stages for several years

. implementation of other measures recommended here such as a storage program, commitment to necessary capital and operating expenditures, establishment of a waste reduction office and a plan for siting these facilities within Metro Toronto

3.2 Role of the province

3.2.1 Waste management regulation

The Ontario government, through the Environmental Protection Act and Environmental Assessment Act, has legislative and regulatory authority over all aspects of public and private solid waste management in Ontario. The two major components of that system are - (1) regulatory standards governing the design and operation of waste disposal facilities and (2) the approvals process which governs new municipal and private waste management facilities.

In 1983 the Ontario government issued the policy document "Blueprint for Waste Management for Ontario." Through this policy statement, Ontario clearly established the objectives of reduction, re-use, recycling and recovery in preference to waste disposal and established the waste management master plan process, under the EA Act, by which municipalities would develop integrated systems for meeting those waste policy objectives.

In 1987 Ontario appeared to move recycling to the top of the waste management hierarchy when it established the Blue Box residential recycling container program and relaxed requirements for re-use of beverage containers. In 1989, policy again appeared to change, in response to fast dwindling landfill capacity, when Ontario announced policy objectives of 25% diversion of waste from landfill by 1992 and 50% diversion by 2000.

In 1990, as mentioned, Ontario announced plans to establish a public body which would dispose of GTA solid wastes. Legislation establishing this body will be introduced in the Ontario legislature in June, 1991. Thus in the GTA solid waste disposal will be a provincial responsibility, while in the rest of Ontario it will be a county or regional responsibility.

In 1991, Ontario established a Waste Reduction Office to implement 3Rs programs and announced plans to make administrative and legislative changes to the Environmental Assessment Act later in the year.

On February 21, 1991, the Minister announced that she had re-established the primary policy of waste reduction and would for the first time take regulatory action to achieve that goal. She stated that:

. "source separation of waste materials will become mandatory at major retails malls, construction and demolition sites, office complexes, hospitality services including the larger restaurants, institutions, such as schools, colleges and hospitals, and larger manufacturing industries." [by means of a regulation in 1992]

. "waste audits and waste reduction plans will be required for major users of packaging materials" [by regulation in 1992]

. "mandatory recycling will be required in all but the smallest municipalities" [by regulation in 1992]

The Minister also said that "The ministry is simplifying its approvals system for 3Rs facilities to expedite their development and expansion."

Like her predecessor, Mr. Bradley, the Honourable Ruth Grier appears to be opposed to incineration of solid waste, even though her government has not yet adopted a policy of banning incineration. At a consultation session on Jan. 15-16, the Minister made these comments:

"The Minister stated her belief that incinerators must be 'fed' once they have been built and the best feed stock for incinerators are materials that should be removed from the waste stream for reprocessing. In addition, incineration does not avoid the need for landfill disposal; incinerator ash must be disposed of and this can cause leachate problems."

More recently, the Minister has announced that the new GTA landfills, to be sited by the disposal authority referred to above, will be located within the GTA boundaries.

In a press release dated April 11, 1991, the Minister "confirmed the government's decision to ban all future municipal solid waste incinerators in

Ontario. ... Ontario becomes the first provincial-level jurisdiction in North America to ban future municipal solid waste incinerators."

3.2.2 Waste reduction

Existing regulation

The only existing regulatory requirements for reduction, re-use or recycling in Ontario are the soft-drink re-usable regulations which require that refillable containers be used for a minimum of 30% of the soft-drinks sold in the province. Such regulatory requirements were first introduced in 1976 and have been the subject of considerable discussion ever since.

MOE estimates that only 18% of soft-drinks are sold in refillable containers and the Minister has indicated her intention to achieve compliance with the 30% requirement. Since the regulation allows the sale of soft-drinks in both refillable and non-fillable containers, compliance with the 30% requirement is dependent upon enforcement action taken by MOE. The industry has mounted an advertising campaign to encourage purchase of refillables and priced refillables lower than other containers.

Since these industry measures have failed to achieve the goal of re-use, it would seem reasonable to move to a regulatory requirement that 100% of soft-drinks be sold in refillable containers.

The soft-drink industry has correctly pointed out that imposition of such regulatory requirements on one beverage and not on others is unfair. Accordingly it is suggested that the province require that all beverages be sold only in refillable containers. This point is discussed in more detail in Section 8.4 Marketing.

Proposed legislation

As set out above, the Ministry will introduce regulations in 1992 requiring source separation and waste audits and reduction plans for some ICI generators. In addition, all municipalities will be required to develop recycling plans.

As set out in Section 5.1 below, the Task Force is recommending that Metro be given powers, through amendments to the Metro Act, which exceed the regulatory requirements being introduced by MOE. The rationale for this approach is that experience gained in Metro could then be applied on a province-wide basis by MOE. The Task Force recommendations concerning the Metro Act are set out in Section 5.1 below.

The other legislative action to be taken by the province in 1991 which has direct implications for Metro is the legislation establishing the new waste disposal authority. There are two aspects of this legislation which are of key importance - (1) the question of whether the Authority's mandate will be limited to establishing and operating a landfill or include also operation of recycling facilities; and, (2) disposition of the revenues which the Authority will receive from tipping fees.

As is discussed in Section 8 below, there is need to clarify as quickly as possible the roles and responsibilities of all of the actors if Metro is to succeed in putting in place the capability of recycling 1,300,000 tonnes of materials by 1993. There will inevitably be duplication and waste of money if both Metro and the new authority are operating recycling programs. In terms of the authority, therefore, that clarification can best come by limiting its mandate from the outset to siting and operating the GTA landfill. Thus the authority would have a mandate limited to waste disposal.

Such a limitation is necessary in any case since otherwise the new authority would have a conflicting mandate - generating revenues from disposal while at the same time working to reduce its own revenues through recycling operations.

As discussed in Part B, Section 7, the Task Force recommends that the capital and operating costs of the recycling program proposed here be paid by waste disposal fees and not from general tax revenues.

Once the existing Metro landfills reach capacity and the new authority landfill begins operation, those disposal revenues will go to the province, not Metro. It is essential, therefore, that that the province return to Metro sufficient revenues to fund the recycling program.

3.2.3 The need for provincial action

Metro Toronto cannot achieve the recommended 50% diversion target in the absence of action by the province. Provincial action is essential in the following areas:

. through amendment of the Metro Act, to give Metro power to require that recyclable materials be separated at source and sent to recycling markets

. to provide for a new regulatory classification of "waste" which has been separated at source and which is destined for storage and then recycling and a new approvals process for facilities handling such materials

. to clarify the existing situation by limiting the mandate of the new authority to disposal only

. to ensure that disposal revenues are available to Metro to fund the large-scale, and therefore costly, reduction and recycling program outlined here

. to eliminate other disposal options, such as incineration or export out of the province

As is discussed below, these actions must be taken expeditiously by the province if Metro is to meet the January 1, 1993 target date.

3.3 Role of the other GTA Regions

Since the Minister's announcement of November 21, 1990, SWISC has acted in advisory capacity to MOE staff charged with creation of the new waste authority. GTA-wide discussion has also occurred through two meetings, on January 15 and February 11, 1991, of the Minister's GTA Waste Management Consultation Group. It appears that SWISC has now been dissolved.

The other Regions, like Metro, are continuing with the non-landfill components of their waste planning process and with implementation of 3Rs programs. Such action taken by the Regions is of no direct relevance to the Task Force program recommended here.

3.4 Role of the area municipalities

At present, the area municipalities are responsible for collection of residential solid waste. The program recommended by the Task Force would not change that responsibility. It would mean, however, that collection would be done on a three-stream basis.

As well as operating curb-side recycling programs such as the Blue Box, area municipalities undertake other reduction activities. In November, 1989, Toronto adopted a policy of requiring recycling programs as part of zoning applications. The most far-reaching action taken by Toronto is the decision, made at the Council meeting of October 22, 23 and 24, 1990, that effective July 1, 1991 all newspapers sold from vending boxes located on Toronto streets contain a minimum of 50% recycled newsprint.

3.5 Role of the private sector

As set out above, in 1990, private haulers collected 1,453,114 tonnes of waste in Metro from the commercial and industrial sectors. The OWMA carried out a survey of recycling activities undertaken by member companies in the GTA area. 22 companies responded and reported that they collected 186,986 tonnes of solid waste a month of which 33,316 tonnes, which represents

17.8%, were recycled.

Part C., below, provides a discussion of some of the issues surrounding the question of whether solid waste recycling in Metro should be primarily be done by governments or by private sector companies.

3.6 Summary: A listing of the players

What follows is a listing of the agencies involved with waste reduction in Metro.

Ontario

Cabinet: policy decisions; legislative action such as Metro Act amendment

MOE:

> **Waste Management Branch, Policy Branch, Waste Reduction Office**: data, developing regulatory policy, and new approvals system
>
> **Approvals Branch**: administers EAA and EPA; presumably will administer new "Permit by Rule" approvals system
>
> **Waste Disposal Authority**: searching for new GTA landfills; presumably will be a crown corporation, analogous to OWMC

SWISC: advisory body to Authority - since the Minister's announcement of November 21, 1990, SWISC has acted in advisory capacity to MOE staff charged with creation of the new waste authority. GTA-wide discussion has also occurred through two meetings, on January 15 and February 11, 1991, of the Minister's GTA Waste Management Consultation Group. It appears that SWISC has now been replaced by an inter-agency advisory body reporting to the MOE Waste Reduction Office.

Office of the Greater Toronto Authority: mandate not clear, but involved in waste policy decisions

Waste Reduction Advisory Council: a multi-sectoral advisory body, reporting to the Minister of Environment; developing mechanisms for assigning waste disposal cost liabilities to generators

Ontario Waste Exchange: facilitates industrial waste recycling

Metropolitan Toronto

Works Committee and Council: policy, spending decisions, enactment of by-laws; all within the legislative authority conferred upon Metro by the province

Works Department: Solid Waste Management administers both disposal and 3Rs programs

Area Municipalities

Works Departments responsible for collection, including recyclable collection such as Blue Box and leaf and yard waste

Waste recyclers and haulers

Private sector firms responsible for collecting commercial and industrial waste, most of which is disposed of at Metro facilities. In profitable areas such as metals, private firms have been recycling wastes for many years. In response to demand generated by recent tipping fee increases, private firms are starting to offer recycling options to their customers.

C.U.P.E.

The union representing municipal waste management staff which maintains an active role in the policy debate.

Public-interest organizations

Organizations such as Pollution Probe have played an essential role in the development of solid waste policy for the past twenty years. In 1990 the major environmental, labour and citizen organizations came together to create the It's Not Garbage Coalition which in turn set forth the principles which the Task Force has explored in this report.

4. Achieving 50% waste diversion by 1993

4.1 Objective

The plan of action set forth in this report will allow Metro to divert half of its waste from landfill disposal beginning in 1993.

On January 1, 1993 the Keele Valley landfill is expected to have approximately two years, or approximately 6 million tonnes, remaining capacity.

If annual disposal is reduced to 1.5 million tonnes per year, that 6 million tonnes capacity will be used over 4 years.

Thus the life expectancy of the Keele Valley landfill will be extended from the end of 1994 to the end of 1996 if this action plan is implemented and if comparable action is taken by the other GTA Regions using the Metro disposal facilities. This short-term objective will assist the new disposal authority by giving it more time to site the new GTA landfills.

The Task Force believes that far more can be done than simply meeting the 50% objective set out here. It is suggested that the program described here should only be a starting point for Metro. In the years following 1993 it should be possible to do far more, particularly in the areas of reduction and re-use.

It is possible over the coming decade to put in place programs which will result in almost no waste going to landfill disposal.

4.2 Metro Waste Disposal Stream: Composition and Quantities

A system for marketing approximately half of the Metro waste stream as recyclable material, which includes compost, can only be established if relatively precise information is available on the types and quantities of materials of used materials generated each year. Unfortunately, such information is not yet available in a precise form. It is possible, however, to make reasonably accurate estimates of the relative composition of the Metro waste stream and of the quantities, measured in tonnes, of the materials generated each year which are available for recycling.

The starting point is division of the total waste into that portion generated by the residential sector and that portion generated by the industrial, commercial and institutional sector.

SWEAP Discussion Paper 7.1 provides the following estimate of the Metro waste stream in terms of those broad categories:

Residential waste	39%	(32%curbside: 7% bulk)
Other municipal	10%	(5% sewage sludge: 5% other)
ICI waste	51%	(commercial 22%: industrial 22%: construction and demolition 5%: other 2%)

Estimates of the composition of both the residential and ICI streams by category of material (newsprint, food and yard wastes) have been made through a number of studies during the past decade. The most relevant available sources are as follows:

1987 estimates by MOE of Ontario waste composition (provided with the Feb. 21, 1991 MOE Information Sheet: "Ontario's Waste Reduction Action Plan: Backgrounder")

Recycling Advisory Committee, Discussion Paper, January, 1989 - MOE estimates

Waste Composition Study, done for MOE Waste Management Branch, March, 1991

Metro Toronto Composition Study, done for Metro Works Department - not yet available

The Task Force reviewed these sources and discussed the question with knowledgeable members of the Metro Works Department and others. What follows is the Task Force estimate of the Metro waste stream and quantities of potentially recyclable materials. It must be emphasized that this is an estimate only, based on the best available information.

It should be further emphasized that the Task Force is not intending to provide an exhaustive estimate of the composition of the Metro waste stream. Instead the Task Force has two very different objectives, as follows:

a) to decide on those materials which both lend themselves most readily to recycling and which offer the greatest potential for diversion from disposal, and

b) to estimate the quantities of those materials - expressed in tonnes generated annually in Metro each year - to allow some initial planning to be done for recycling activity on such a scale.

The estimates so made by the Task Force are set out in the following two Tables.

Table 1. Task Force estimate of quantities of recyclable materials which were available in the 1990 Metro Residential Waste Stream

Residential disposal in 1990 - 943,419 tonnes: Blue Box - 82,278 tonnes: leaf and yard compost - 31,696 tones: total disposal and recycling 1,057,393 tonnes

Recyclable material	% of residential waste stream	Quantity available for recycling
Newsprint	15%	158,609 tonnes (of which 55,220 collected in 1990 by Blue Box)
Fine paper	1%	10,574
Non-contaminated wood	1%	10,574
Old corrugated cardboard	3%	31,722
Glass	5%	52,869 (of which 12,267 Blue Box)
steel and aluminium cans	3%	31,722
white goods	2.5%	26,435
organic, food	20%	211,478
organic, yard	10%	105,739 (of which 31,696 diverted in 1990)
excavated soil	9%	95,165
PET plastic and polyolefins plastic	5%	52,869
textiles	4%	42,295
diapers	3%	31,722
household hazardous	.5%	5,287
other	18%	190,331(of which 14,790 went to Blue Box)

Table 2. Task Force estimate of quantities of recyclable materials which were available in the 1990 Metro ICI Waste Stream

1990 disposal of industrial, commercial, institutional - 1,453,114 tonnes

Recyclable material	% of ICI waste stream	Quantity available for recycling
newsprint	3%	43,593
fine paper	18%	261,560
non-contaminated wood	10%	145,311
old corrugated cardboard	23%	334,216
glass	2%	29,062
steel, aluminium cans	2%	29,062
metal	8%	116,249
organics, food	10%	145,311
plastic	5%	72,655
other	19%	276,092

Note: Estimated diversion of 91,500 tonnes not taken into account due to lack of data.

4.3 Annual waste capacity needed for 50% diversion

As set out above, 50% diversion represents approximately 1,200,000 tonnes.

The major criteria for deciding which materials should be given priority for recycling include (1) cost-effectiveness of collection, sorting and storage; (2) potential impact on total diversion; and (3) availability of markets. Using these, criteria, the Task Force suggests that Metro give initial priority to reduction in the following three categories:

. food and yard waste for composting

. fibre materials - newsprint, fine paper, corrugated cardboard and wood

. glass, metals and plastic

Quantities in these categories generated in 1990 by the combined residential and ICI sectors were as follows:

. food and yard waste	462,528	
. fibres	996,159	
. glass, metal, plastics	410,923	
Total	1,869,610	or 74% of the total Metro 1990 disposal, Blue Box and leaf and yard waste stream

Thus it would seem that the target of 50% is achievable.

Presumably the efficiency of source separation will be less than 100% and therefore quantities available for recycling will not correspond precisely to the 1990 estimated quantities for each category. What follows is a listing of 1990 estimated totals for each category and an approximation of the quantity which might be avaible for recycling, if separation is mandatory.

As can be seen, the following estimates assume a very efficient rate of collection. This efficiency rate will be decided by such things as the effectiveness of Metro education, assistance and compliance and enforcement programs.

Material recycling	1990 quantity (tonnes)	available for (tonnes)
residential organics	317,217	250,000
ICI organics	145,311	140,000
newsprint	202,202	200,000
old corrugated cardboard	362,519	350,000
fine paper	262,503	250,000
glass, metal, plastic	405,525	350,000
wood	146,254	140,000
Total	1,777,977	1,680,000

It is not possible to predict the efficiency rate of recycling these quantities - that is, the portion of each total shown above which would go to market and the remaining residue which would go to disposal. Presumably efficiency rates would vary for different materials.

If over-all recycling was at an 80% efficiency rate, 1,344,000 tonnes (80% of 1,680,000) would go to market and the remaining residue of 1,052,533 would go to landfill disposal.

It is likely that this 80% estimate is conservative and that in some instances, recycling processing efficiency would be higher. On the other hand the estimated collection efficiency rates, set out above, may be high.

These estimates lead to a predicted reycling rate of 56%of the 1990 wastes which went to disposal.

PART B. IMPLEMENTING THE FIVE PRINCIPLES

Source separation is closely related to collection, currently a responsibility of area municipalities in Metro. It could be argued that mandatory source separation is more efficiently implemented at this level. Metro's area municipalities currently operate the voluntary source separation programme for residential wastes - the blue box programme. Arguably, the most efficient, least disruptive approach would be to build on this experience by extension to commercial and industrial and establishing enforceable mandatory standards at the local level. This could be achieved by amendments to the Municipal Act in combination with the passage of by-laws by the area municipalities. The approach, however, raises problems of ensuring an integrated system, and uniform, evenly applied standards. Each municipality may have a different set of priorities, and economies of scale and organization are gained by a more centralised regulatory system.

This leads to a contrary proposition that the measures proposed could be more efficiently, and comprehensively implemented through Province-wide legislation and regulation, which establishes one uniform set of standards for the collection and movement of recyclable materials. This would ensure equal treatment of generators and waste disposal operators across the province.

It could be argued that it is more efficient to make all the necessary legislative changes to require mandatory source separation by way of a one time amendment to the Environmental Protection Act and its regulations, applicable province-wide. Further, it could be argued that mandatory source separation is better regulated at the provincial level, to ensure uniformity with liquid industrial and hazardous waste generation, treatment and movement, which are controlled by the province.

On the other hand, this approach is potentially the most disruptive, since the province has no practical experience in the operation of solid waste management systems, an area of municipal expertise. Further, implementation of mandatory source separation at a province wide level is likely to be lengthy and cumbersome. It is likely to be more effective to move quickly to establish a precedent at a level where immediate action is feasible. There is an opportunity to put a Metro wide programme in place through immediate action by the provincial legislature to amend the Metro Act. By allowing Metro to take the lead, the province could establish the viability of waste diversion on a significant scale and through Metro's experience, pave the way for changes across province. The province could them prepare to extend mandatory source separation to other municipalities through amendments to the Municipal Act and Regional Acts.

The Task Force firmly believes that Metro Council is the player best suited to take the lead.

Recommendation:

1. That Metropolitan Toronto Council make a commitment to diverting from disposal, through reduction, re-use and recycling, 50% of 1990 total municipal, industrial, commercial and institutional waste quantities by 1993.

5. The First Principle: Mandatory Source Separation

As set out above, recycling at present is done only on a voluntary basis. Such an approach is inherently inefficient and inequitable. Instead, the same legally binding requirement to separate at source must be imposed upon all generators.

Section 5.1 below discusses legal action to make source separation mandatory, while the following parts of Section 5 discuss other aspects.

5.1 Legislating Mandatory Source Separation

This section describes the changes which need to be made to the Metro Act and the proposed Metro Waste Reduction By-law.

5.1.1 Amending the Metro Act

As discussed in section 3.1 above, current legislation gives Metro only limited waste management powers. The Municipality of Metropolitan Toronto Act allows Metro to control the amounts and types of wastes entering its facilities, but does not empower Metro to require source separation. In addition, Metro can only ban wastes from its own facilities. Metro can not prohibit the landfilling of recyclable materials which are generated in Metro but disposed of in a facility which is not operated by Metro

In order to implement the principle of mandatory source separation the Metro Act must be amended to include provisions requiring generators to sort these materials and divert them from the waste stream. In order to "close the loop" and ensure that recyclable materials are in fact recycled and do not go to waste disposal sites, Metro must also have regulatory powers to control the movement of wastes to appropriate facilities. These regulatory powers would be complemented by an expanded landfill ban system as described in 5.2 below.

As discussed, the Metro Solicitor has drafted a proposed amendment to Sections 66 and 67 of the Municipality of Metropolitan Toronto Act which would permit Metro to carry out regulatory activities associated with mandatory source separation. Those powers could only be exercised if they were put into a Metro by-law.

The proposal provides the municipality with all of the regulatory powers required to put in place an extensive mandatory source separation program by empowering Metro to:

designate materials as "recyclable" by-law

establish criteria for the classification of waste and recyclable material

establish and operate programs for the reduction and re-use of waste prohibit or regulate the receiving or disposing of recyclable materials at Metro facilities

inspect waste loads brought to Metro facilities and require documentation and disclosure of the types and quantities of waste to be received by Metro facilities (s.66(5) l)

specifically designate the destination of wastes generated within Metro, thereby controlling whether or not certain wastes are disposed of on land, processed, stored or diverted through reduction, reuse or recycling

establish guidelines for separation at source of collection of recyclable materials

require generators to separate recyclable materials at source

exempt generators from these source separation requirements where recycling is otherwise provided for (for example, where separation is to take place at a material recycling facility)

require owners and operators of businesses and apartments to establish, file with Metro, and comply with a " waste reduction plan" which includes the disclosure of the method of generation of waste, the type and quantity, types of wastes which could be recycled, a schedule for improving waste management, periodic reporting after filing

prohibit area municipalities from establishing waste management facilities or carrying out collection of waste or recyclable without Metro's consent

prohibit any person from carrying out waste management without consent of Metro Toronto

requiring a permit from Metro for transport of Metro waste by private waste haulers requiring haulers to obtain a bond or line of credit

impose substantial penalties for failure to comply with waste management and recycling requirements as set out in Metro by-laws

Source Separation

The proposed amendments would give Metro, for the first time, the power to have a direct impact on the front end of the waste stream - to actually compel generators to divert materials away from disposal options at source through mandatory source separation. Section 66(5)(g) would allow Metro to require industrial, commercial, institutional and other waste generators to separate recyclable materials. By Section 66(5)(h) Metro could require major generators to establish and comply with a "waste reduction and recycling plan". By-laws passed pursuant to theses sections could establish guidelines for carrying out source separation and for filing information on the waste generators operation and existing and proposed practices

The revisions to the Municipality of Metropolitan Toronto Act proposed by the Metro Legal Department would establish legislative authority for mandatory source separation in Metro.

Controlling the Movement of Wastes

The changes would extend Metro's existing power to establish landfill bans at Metro facilities. Currently, Metro has no means of ensuring that recyclable materials generated within Metro are not sent to non-Metro facilities which do not ban recyclable materials. The proposed changes would address this deficiency. Specifically, the draft changes would allow Metro to prohibit the establishment of waste management systems in Metro without the prior consent of Metro Council. Metro could withhold consent for new facilities unless the operator agreed not to except recyclable materials.

In addition, proposed section 66(5)(e) would empower Metro to require generators to send specified classes of waste to recycling facilities. This change would allow Metro to forestall the flow of recyclable materials to waste disposal facilities outside of Metro.

Taken together, these legislative amendments would give Metro the power to effectively prevent the disposal of recyclable materials generated within Metro boundaries. They would ensure that the disposal ban applied to all generators, and not just those which utilize Metro-operated facilities.

Recommendations:

2. That Metro Council request that the provincial government amend the Metropolitan Toronto Act as set forth in the report of the Metropolitan Toronto Solicitor, November 27, 1991.

3. That Metro Council request that the provincial government take steps necessary to ensure the Act is amended no later than December 31, 1991.

5.1.2 The Metro Waste Reduction By-law

While the province takes the primary role in expediting the establishment of enabling legislation, Metro must focus on the development of a Waste Reduction By-law. The by-law should put in place a "closed loop" regulatory system materials to be diverted from landfill which includes the following features:

(1) Materials to be separated from the waste stream

As set out in Section 4 above, the Task Force recommends that all generators be required to separate and send to a recycling or compost facility, the following:

. food and yard wastes
. newsprint, fine paper, non-contaminated wood, old corrugated cardboard
. glass, metals and PET and polyolefin plastics

These materials would be collected on the basis of a three-stream system - wet materials for composting, dry materials for recycling and mixed wastes for garbage disposal.

(2) Process for adding to the list of materials to be separated

Additional materials for mandatory source separation should be phased in to provide for the most efficient expenditure of resources. Schedule A to the by-law would list the materials, set out above, which would be immediately subject to source separation requirements.

Schedule B would list materials to be subject to future source separation by a date specified in the schedule.

The by-law would include a mechanism for regular updating of the "to be subject list" (schedule B) and transfer of materials from the "to be subject list" to the " subject list" (schedule A). The decision expand schedule A or B, or to transfer listed materials from schedule B to A, would be made by a special committee with representation from MOE, Metro works, waste generators, the recycling industry, and environmental groups, based on criteria set out in the by-law. These criteria include:

-feasibility of at-source reduction through changes to production processes or suppliers

-feasibility of on-site reuse or recycling

-availability of safe storage facilities

-availability of waste exchange options

-availability of off-site recycling facility

Materials listed on schedule A could not be removed with out the consent of Metro council.

The by-law would also provide for the phasing in of source separation requirements for generators. The by-law would be enacted in 1992 but not come into effect until 1993.

(3) Generator and Hauler Registration

All ICI generators and haulers would be required to register with Metro. For generators this would involve completion of a simple form which indicates the following: name, address and telephone number of firm; name of employee designated as "waste manager"; estimate of weekly waste generation; estimates of amounts of each category of recyclable materials; name and address of hauler; name and address for destination of all recyclable materials and wastes.

For haulers registration would involve completion of a form which indicates: name, address and telephone number of firm; list of all customers; haul routes and types and amounts of materials transported Metro for each Metro generator; and a list of facilities to which Metro- generated wastes and materials are transported.

(4) Mandatory recycling of recyclable materials listed in the by-law

The by-law would expressly state that all generators are required to separate and transport to specified facilities all materials set out in schedule A of the by-law. Schedule C would contain a list of recycling facilities approved to receive identified schedule A wastes.

Recommendation:

4. That Metro Council enact a Waste Reduction By-law, to come into effect January 1, 1993, which provides for the following:

. mandatory separation by all generators of their waste stream into (1) food and yard wastes; (2) recyclable materials listed in the by-law, as follows - newsprint, corrugated cardboard, fine paper, metals, glass, metals, PET and polyolefin plastics; (3) garbage waste for disposal

. a method for adding to the list of materials which must be separated at source

. a prohibition on disposal of recyclable materials listed in the By-law

. registration of waste haulers with Metro

. registration with Metro of industrial and commercial generators which generate more than 200 tonnes of solid waste a year

Filing of Waste Reduction Plan

Within six months of the passage of the by-law (twelve months for small generators) major generators would be required to file with Metro a waste reduction and recycling plan designed to meet, at minimum, the target of 50% diversion from the waste stream by January 1 1993. The by-law would include a model plan to which generators must conform. Generators failure to file and begin to implement a plan within six months would be (1) obligated to carry out source separation for all schedule A materials, and (2) subject to prosecution for both failure to source separate and failure to file and implement a plan.

Implementation of Waste Reduction Plan The model plan would require generators to take the following steps in developing and implementing the plan:

Step 1	Develop and implement a strategy for reduction of wastes generated including: alteration to production processes; substitution of materials used in production; and reduction of packaging materials through arrangement with existing or change of suppliers. Establish specific reduction targets and deadlines and a monitoring and reporting system to track progress
Step 2	identify waste streams and reusable, and recyclable materials
Step 3	Identify on site opportunities for reuse and recycling
Step 4	Identify off site destinations for reusable and recyclable materials including waste exchanges, recycling facilities, and storage facilities.
Step 5	Establish on site facilities and operations for the separation, storage and collection of reusable and recyclable materials
Step 6	Establish an employee training programme for source separation, reuse and recycling. Designate an employee as

responsible for ensuring proper waste management.

Step 7 Establish a regular monitoring and reporting system for tracking waste diversion including monthly reports which are kept on file by the generator.

Step 8 Report annually to Metro works department on waste diversion, including estimates of amounts generated, and amounts diverted from waste disposal to reuse or recycling and improvements to the plan.

In addition the plan would require the generator to set a schedule for implementation of steps listed above. Each plan would be approved by Metro staff. A file would be kept on each generator which would include the registration form, the approved plan and the annual progress report.

5.2 Disposal bans

As of April 1, 1991, the following materials were banned from Metro landfills. In some cases materials are allowed for disposal providing they constitute less than the stipulated per centage of the load - referred to as "load tolerance"; tolerances shown are those coming into effect July 1, 1991.

white goods

recyclable, ie, non-contaminated, corrugated cardboard - 20% load tolerance

tires - 5 tires per load tolerance

drywall

recyclable wood waste - uncontaminated wood products and waste -

recyclable scrap metal

clean fill, concrete and rubble

petroleum contaminated fill

fine paper

usable off-specification and surplus goods

As set out above, it is recommended that a system be developed under the Waste Reduction By-law to expand the list of materials which must be separated at source. As that is done, of course, those materials will also be banned from landfill disposal.

Recommendation:

5. That Metro Council ban from landfill disposal all materials listed in the Waste Reduction By-law for mandatory separation at source.

Banning a material for which there is no recycling or storage option may lead to disposal elsewhere and thus provide no environmental advantage.

6. That Metro Council ban additional materials as they are added to the by-law mandatory separation list and that storage or recycling alternatives be provided for those materials.

Finally, as set out above, it is recommended that Metro have the authority to not only ban a material from disposal at a Metro facility but also to require that it be sent to a recycling option. This power should be augmented by provincial action to close off disposal options for potentially recyclable materials. At the moment, the major such options are incineration and export to disposal in the United States or elsewhere. Although the Minister announced on April 11, 1991, the government decision to prohibit future incineration, this decision has not yet been incorporated into provincial legislation.

Recommendations:

7. That Metro Council request the province to put in place a regulation under the Environmental Protection Act prohibiting construction and operation of new municipal solid waste incineration facilities.

8. That Metro Council request the province to put in place a regulation under the Environmental Protection Act prohibiting the export of mixed solid waste from the province.

While recyclable materials may be exported to global markets, mixed garbage wastes must be disposed of only in the province.

5.3 Disposal pricing

Tipping fees have increased from $18.50 per tonne in 1987 to $150 in 1991. It seems clear that this policy has contributed to the decline in disposal quantities during 1989 and 1990. Disposal rates have dropped in 1991, presumably in response to the $150 per tonne fee charged to private haulers. At least some of that material is going to recycling, as evidenced by the OWMA survey noted above in Section 3.5.

There are limits to the effectiveness of disposal pricing as a policy instrument for achieving reduction, however:

. although some waste appears to have gone to recycling, there is no evidence that any has been driven further up the hierarchy to re-use and reduction

. it is likely that waste diverted from Metro facilities will go to other, cheaper disposal options; at these prices transportation costs become less significant and disposal in other parts of Ontario (if capacity can be found) or the U.S. becomes an economically attractive option

Uniform tipping fees across Ontario and a ban on export of waste out of the province, as recommended above, would assist in solving the problem. It is also recommended by the Task Force, that Metro be given the power to require that recyclable material are sent only to recycling and not to disposal.

This does not mean that the policy instrument of high disposal pricing should be ignored. Disposal pricing policy meets the essential objective of generating revenues to fund reduction, re-use and recycling programs, ensuring they need not be funded from general tax revenues, while at the same time providing a direct incentive for reduction.

Significant revenues have been generated and set aside in the Metro waste reserve fund in the past three years.

The balance in the reserve fund as of January 1, 1991 was $197,744,396.

Metro Works Department estimates that a further $196,969,470 will be generated by tipping fees in 1991 but that $262,647,356 will be spent during the year, leaving a closing balance on December 31, 1991 of $133,136,510. Only a small portion of the 1991 expenditure is on waste reduction measures.

If this ratio of revenue to expenditure - which produces a shortfall in excess of $60 million - is repeated in 1992 and 1993 the fund will be virtually exhausted. The Task Force suggests therefore, in section 7.1 below, that Metro Council enact a policy resolution stating that waste reserve funds will only be used for waste reduction capital and operating costs.

It is further suggested that the province confirm, through the legislation establishing the new authority, that Metro waste disposal fees will be used to finance Metro recycling operations.

Metro disposal pricing at present applies only to private sector generators. It has been suggested that Metro might begin charging area municipalities the same per tonne fee for disposal as is charged to the private sector

The Task Force is not in favour of charging area municipalities. Such an approach is an indirect and unnecessarily cumbersome way of achieving reduction objectives - each area municipality would have to establish its own reduction program to avoid some part of the fee - which should only be used in the absence of more direct and effective methods. The program set out here, relying on regulatory powers exercised by Metro, is a more direct and cost-effective method.

Recommendation:

9. It is recommended that Metro continue to encourage waste reduction, re-use and recycling by means of high disposal fees.

5.4 Compliance and enforcement

By-law requirements that all generators separate certain materials are of no value unless they are obeyed. As has been demonstrated in recent years by attempts to enforce the Metro by-laws governing sewer discharge of industrial wastes - in which offenders were convicted and fined up to twenty times without changing their behaviour - Metro's enforcement capability at present is weak.

For that reason, the Task Force suggests the following approach.

. significantly increase available staff: these staff would have two functions; (a) to assist larger generators, by providing advice and technical assistance, in establishing separation systems, (the "compliance" function) and (b) to detect and then deter, by means of court prosecutions, illegal behaviour (the "enforcement" function)

. following the successful model of the MOE Investigations and Enforcement Branch, which is completely separate from the assistance function performed by abatement officers, these two functions should be housed in completely separate divisions of the Metro Waste Reduction Office, discussed below

. increase fine levels available under the Metro by-law

Recommendation:

10. That Metro Council establish an enforcement department within the Metro Waste Reduction Office with the objective of ensuring full compliance with the requirements of the Waste Reduction By-law both at the point of collection and at the landfill; the "assistance" and the "enforcement" functions should be housed in two separate divisions.

It is recommended that Metro utilise a range of compliance mechanisms to ensure compliance with reduction and separation requirements at two points in the waste stream: (1) at the source of generation; and (2) at the landfill.

This range of methods would include the following:

. public education and advertising, as at present

. subsidy for costs borne by the generator; for instance, below-market price are now charged for home composters as an incentive to separate at source - the same principle could be applied to the ICI sector

. technical assistance, from publication of manuals, phone services, through to consulting services, offered on-site

. reporting requirements through the hauler and generator registration; matched with registration of all disposal and recycling facilities to allow tracking of used materials

. warnings - eg, pick up from illegal mixed waste from generators, or accept at the landfill, but issue a warning; after a specified number of warnings stronger measures would be used

.refusal of service - as in present bans; this could be extended to residential collection; it may lead to unhealthy disposal, however, if the generators does not take the waste back from curbside; in the same way, private collectors could be required not to pick up mixed waste - ICI refusal of service can more easily be implemented at the landfill

. perform the service and charge the generator the cost - mixed wastes would be separated by Metro staff and the generator would then be billed

. prosecutions - with increased fine levels under the amended Metro Act

It is further recommended that residential compliance be sought through a separate program from industrial and commercial compliance.

5.4.1 At Source

Industrial and commercial

Enforcement of mandatory source separation requirements would begin after a year-long education period, ending on December 31, 1992.

Waste reduction coordinators (WRC) would assist generators in the development of separation plans and carry out spot checks to monitor progress, focusing at first on major ICI generators. Once plans were in place WRCs would provide assistance in implementation. The MWRO would serve as a resource centre and clearinghouse for reduction strategies and technologies. The WRC would advice on funding opportunities and connect generators with waste exchanges, recyclers, storage facilities and haulers.

WRCs would also be responsible for monitoring progress through review of generator files and yearly updates. Each year the MWRO would submit a report on progress toward specified targets. The report would evaluate progress to date, identify areas needing improvement, set priorities and recommend changes, and revise targets to keep pace of improving technologies.

Generators who failed to comply with the by-law requirements would be referred by the waste reduction coordinator to an enforcement officer, in a separate division of the Metro Waste Reduction Office, for further investigation. In addition, by-law enforcement officers would carry out spot checks to ensure compliance with source separation requirements.

The Metro Legal Department would then prosecute illegal behaviour.

Residential

Again, enforcement would only begin on January 1, 1993, after a year long period of notifying residents of the new requirements to separate their waste.

Such notification might take a variety of forms, including advertising, mailing of explanatory literature, community discussion and door to door canvassing.

It is suggested that Metro use the same approach to residential enforcment of the separation by-law as Toronto does to its snow-clearing by-law.

Recommendation:

11. That Metro Council institute a program whereby staff separate mixed wastes which are put out for collection and the generator is then charged for that service in the same manner that the City of Toronto charges for sidewalk snow clearing.

5.4.2 At the Landfill Site.

Metro has recently put in place a combined surcharging and enforcement procedure for ensuring compliance with landfill bans. Presumably the same approach can be used for mandatory source separation but it is not appropriate to suggest changes in this approach until its effectiveness can be evaluated. It is recommended that Metro establish a programme to monitor the effectiveness of these efforts. This would involve the monitoring the ratio of quantities of wastes landfilled to schedule A recyclable materials to other facilities on a quarterly basis, and to keep track of the number of violations at the site. The results and recommendations for changes to the enforcement programme should be reported in the first MWRO annual report.

A possible difficulty which needs to be addressed is limitations on Metro's ability to enforce its by-laws outside its own borders; ie, by prohibiting export of recyclable materials to disposal options outside Metro. It may be possible to establish programs which rely on the assistance of the Ontario Provincial Police, Customs Officers and other agencies.

6. The Second Principle: Providing Storage Capacity

6.1 The need for a storage program

As set out in Section 2, above, storage is an important part of the Coalition five-part program and is essential to the success of the Task Force 50% reduction and diversion program for the following reasons:

1. To give Metro the ability to cope with price fluctuations in the recyclable materials market and to avoid being forced to dispose of materials when their market is temporarily depressed, simply because there is no storage capacity available.

2. Like inventory space capacity in a manufacturing and sales process, storage is a normal and essential part of the recycling process. Inevitably recyclable materials will have to be stored for a few days at least, after processing and prior to shipment to market.

3. To provide an alternative to disposal for materials for which there is not yet a recycling market.

For purposes of this discussion, the type of storage referred to in points #1 and #2 above, in which materials would probably not be held for more than 12 months, is referred to as "inventory" storage. The type of storage referred to in #3 is termed "long-term" storage.

Inventory storage can be done in industrial warehouse space or, for materials such as glass and plastic which are not affected by weather, in the open. Longer-term storage might be done by other methods, such as a dedicated landfill cell.

In addressing the subject of storage, there are four major issues which need to be decided:

1) What materials need to be stored? This depends, of course, on the availability of markets.

2) What type of storage do they require? In particular what precautions must be taken to guard against fire, human health threats and environmental damage?

Problems such as Hagersville and the St. Basil-Le-Grande PCB fire of 1988 have shown the potential dangers associated with waste storage. Storage must ensure both environmental protection - no ecological health threats - and adequate security, particularly in terms of fire.

3) For how long will various materials require storage? This depends on two factors. First, the availability of markets and second the "shelf-life" of products, like newsprint, which degrade over time and lose their value as a recyclable material.

4) How can Metro obtain this needed storage capacity in the most cost-effective manner possible? This primarily involves a choice between rented space and purchase of land and construction of buildings.

It is estimated that Metro now has 15,000 tonnes storage capacity at the Disco transfer station and Commissioners St. station. The point to note is that Metro has been operating a storage program for several years now - as illustrated in Figure 4, following. The difficulty is that the program is ad hoc and needs to be established as a permanent, on-going program, which plays an integral part in the over-all waste reduction and diversion, as does source separation, collection, processing and marketing.

It is not possible to provide definitive answers to the four questions listed above until Metro has some experience with operating a recycling program on a much larger scale than the existing Blue Box program. For that reason, the Task Force makes two suggestions:

Figure 4. [redacted]

Toronto Star, August 20, 1990

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FRANK GUNN/TORONTO STAR

PAPER MOUNTAIN: Works commissioner Bob Ferguson stands at a Commissioners St. plant amid newspapers to be recycled. Critics call the blue box scheme a con.

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a) initiate a pilot program in 1993 for inventory storage, using leased space rather than owned space in order to keep option open; Metro should then design a permanent program for 1994 and subsequent years, possibly using owned space

b) begin now to investigate the preferred methods of providing long-term storage

6.2 A proposed inventory storage pilot program in 1993

An estimate must be made of the warehouse and open space to be leased for the pilot program. SWEAP Report 3.4, suggests that storage is not required for the following materials because ready markets are available:

colour sorted glass
aluminium and steel cans, other metals
fine paper
separated plastics
wood waste, shavings
non-reinforced concrete
used auto oil
lead acid batteries
silver oxide button cell batteries

Storage is required for up to one year for the following materials:

corrugated cardboard
newsprint
wood, sawdust
tires
reinforced concrete
asphalt
wallboard

Longer term storage might be required for:

mixed glass
contaminated mixed glass
compost
mixed paper
mixed plastic

In Section 4.3, above, estimates were made of quantities of recyclable materials which could be collected in 1993, once the mandatory source separation program is in effect. It was assumed that over-all processing efficiency would be 80%, with the remaining 20% residue going to garbage disposal.

Thus the Task Force has made the following estimates of total quantities generated in one year which might require storage:

compost	272,000 tonnes (390,000 tonnes generated, less 75,000 going to home compost, at 80% efficiency)	
newsprint	200,00 tonnes	(200,000 tonnes collected, since no processing other than baling, assume 100% efficiency)
occ	350,000	(350,000 tonnes collected, since no processing other than baling, assume 100% efficiency)
fine paper	200,000	(250,000 tonnes collected, assume 80%)
wood	145,000	(145, 000 collected, 100%)
glass	60,000	(75,000 tonnes collected, assume 80%)
cans	45,000	(assume 45,000 collected, 100%)

metal	139,00	(assume 139,000 collected, 100%)
plastics	119,000	(assume 119,000 collected, 100%)

Based on the SWEAP report and discussions with Metro staff, it is estimated that markets will be readily available for the following materials on the above list:

newsprint
fine paper
wood
colour sorted glass
cans
plastics

It is assumed, however, that 1 month generation quantity will be required for these materials as part of the normal processing and marketing process. Thus the following storage capacities would be required

newsprint	16,000
fine paper	16,000
wood	12,000

colour sorted glass	1,250 tonnes
cans	3,750
metal	11,000
plastics	9,000

It is assumed that as much as 6 months storage might be required for mixed glass, occ, and compost:

occ	175,000 tonnes
compost	136,000
mixed glass	7,500

Thus Metro will need to provide for the following tonnages in the 1993 pilot storage program:

indoor, fire-secure warehouse space for newsprint, fine paper and occ	207,000 tonnes
outdoor storage, secure and covered, for glass, metals and cans, plastics	32,500 tonnes

Based on current costs of leasing secure indoor warehouse space and outside storage space, these volumes would represent the following costs:

. indoor warehouse, one year rental	$17,359,157
. outdoor space	$ 101,075

Thus the 1993 cost to Metro, excluding inflation, would be in the neighbourhood of $17.5 million.

Recommendations:

12. That Metro Council carry out a pilot program for storage of recyclable materials at an estimated cost of approximately $17.5 million and that a permanent storage program then be developed, based on experience gained in 1993.

13. That Metro Council investigate options for longer-term storage.

It is also suggested that as part of the storage program, Metro investigate establishment of re-use centres. Such centres would allow residents to drop off items which they no longer require but which can be re-used, with or without some repair. Such centres would not only add to waste diversion but also provide additional employment opportunities.

6.3 Generator storage

Generators need to provide short-term storage for materials which have been source separated and are ready for collection. Presumably these demands will be relatively minimal, since more frequent collection can be provided as needed.

Recommendation:

14. That Metro Council ensure that Official Plan, zoning and building code requirements for new buildings ensure necessary storage capacity is provided.

7. The Third Principle: Allocation of sufficient resources

The 1991 operating budget of the Metro Works Department Solid Waste Management Division is approximately $82 million. During past years spending focus has increasingly shifted from waste disposal to waste reduction activities. In the 1991 Division spending on staffing and associated costs for recycling are in the neighbourhood of $20 million and transfer payments to area municipalities are approximately $6 million.

As set out above, in Section 5.3, revenues from disposal pricing are now significant and may be enough to offset initial capital and operating costs of the 50% recycling program recommended here. (In the longer-term, however, as the success of 3Rs programs reduces disposal quantities, and therefore revenues, other funding sources will have to be explored). In addition, revenues from sale of recyclable materials will also be available. It is essential, however, that:

a) Metro use disposal revenues only to fund reduction activities and not for other purposes

b) the province remit sufficient disposal revenues to Metro to cover reduction activities, once the new authority is operating landfills

c) Metro establish a marketing system capable of maximizing recycling revenue

7.1 The Metro waste reserve fund

As discussed in Section 5.3, above, the balance of the reserve fund on January 1, 1991, was $197,744,396. Given spending decisions by Metro Council, that balance will be depleted to approximately $133,000,000 by the end of the year.

If there is a net expenditure from the fund of $60 million again in 1993 and 1994 the fund will be exhausted. That would remove any possibility of using those funds for reduction activities.

Recommendation:

15. That effective immediately waste reserve funds be used by Metro Council for no purpose other than Metro waste reduction capital and operating costs.

Revenues from tipping fees will only flow to Metro until the landfill capacity which Metro now owns is exhausted. At current rates of disposal, and tipping fees, as set out above, Metro will generate something in the order of $200 million a year for the reserve fund. At current rates of disposal that capacity will be exhausted by the end of 1994, which means that Metro can only generate a further $600 million for the fund. Thus if the recommendation above is enacted, Metro will have available some $700 million for waste reduction and operating costs over the period January 1, 1992 to December 31, 1994.

Once Metro landfill capacity is exhausted waste disposal will be done by the new provincial authority. The Minister has stated, by letter dated January 22, 1991, that the new authority will be "self-financed through tipping fees". What is not clear is whether or not this includes tipping fees generated by Metro, using existing Metro capacity. Since these funds will be needed by Metro to pay for the waste reduction program outlined here, (and transfers from the authority to Metro, to finance the Metro recycling program, will be needed after it begins operations) the Task Force suggests that the province clarify the situation now.

Recommendation:

16. That Metro Council request the provincial government to confirm that revenues generated by existing Metro landfill capacity will not be used to finance the new provincial authority.

It is also essential that Metro continue to have access to disposal fee revenue after the new authority begins operation of the new GTA landfills.

Recommendation:

17. That Metro request the provincial government to ensure that legislation establishing the new provincial waste disposal authority will require transfers of funds from provincial disposal revenues to Metro, to be used only to fund waste reduction, re-use and recycling activities.

This issue of potential funding sources is discussed again in terms of the outstanding question of public and private roles in waste recycling in Part C below.

7.2 Capital and operating costs of the Task Force program

Capital costs:

An estimate of $50 million for the capital cost of construction of three plants - 1 compost; 1 MRF; 1 sorting construction waste - is provided in the Commissioner's report of Feb. 13, 1991. This report assumes these three plants would lead to a waste reduction of 33%. The Task Force has been informed verbally by Metro staff that this estimate may be low and that total capital costs for the three plants may be as high as $150 million.

Capital costs for construction of compost plants in the U.S. vary from $3 million for a 50 tonne per day plant to $70 million for a 350 tonne per day plant. The type of plant, as well as daily or annual capacity, leads to major capital cost variances.

The Task Force has not been able to do a capital cost estimate for the construction of compost and recycling facilities capable of accommodating 1.3 million tonnes of materials per year. However, a rough estimate can be made from the Works Department forecast of a capital cost of $50 to $150 million to achieve approximately one-third diversion. Presumably the 50% diversion recommended here can be obtained at a capital cost of less than double that of the one-third diversion.

It is assumed, therefore, that Metro can implement the Task Force program at a capital costs of less than $200 million.

Recommendation:

18. It is recommended that Metro provide capital funding of up to $200 million for construction of compost and MRF facilities.

Operating costs:

The net cost per tonne of the Blue Box program in Metro is approximately $200;. A cost estimate of the net cost of recycling in different Ontario municipalities has been done by the Recycling Council of Ontario. RCO estimates that average cost , is $110 - $120 per tonne.

The operating cost estimates in the Feb. 13, 1991 report of the Works Commissioner are $105 per tonne for compost and dry materials and $65 per tonne for construction materials.

The Task Force assumes that efficiencies of scale will allow Metro to operate at the program recommended here at an average net cost , after revenues received from sale of recyclables, in the neighbourhood of $150 tonne. Therefore annual operating cost in 1993 is estimated to be approximately $195 million to manage 1.3 million tonnes of material. As noted, the cost to lease storage space will be in the neighbourhood of $17.5 million.

A detailed estimated of operating costs for the proposed Metro Waste Reduction Office has not been prepared. However, it can be assumed that cost will be higher, due to increased staffing, than the existing $20 million operating cost for recycling within the Department. Presumably costs would not be more than double, however.

Thus the Task Force estimates the 1993 operating cost of the program recommended here, in 1991 dollars, to be:

. recycling and composting, net:	$195 million
. storage	17.5
. MWRO	20 (additional cost; existing $20 million is included in the $195 million)
Total	$235.5 million

Recommendation:

19. That Metro Council provide, beginning in 1993, annual operating funding of up to $250 million for the program outlined here, to be taken from disposal revenues and the waste reduction fund.

This cost is only somewhat in excess of expected annual disposal revenues in 1991 and 1992. Disposal revenues will decrease by half, however, in 1993, with the diversion of 50% of the waste stream. The issue of funding sources is discussed further in Part C below.

8. The Fourth Principle: Establishment of a Metro Waste Reduction Office

8.1 Position in the Metro management structure and elimination of duplication

When the Task Force began its work in the summer of 1990, the intention was to develop plans for a Metro Waste Reduction Office which would be independent of the waste disposal function performed by the Solid Waste Management Division. The intent was to avoid a situation in which the Division was attempting to simultaneously pursue two contradictory goals - maximize revenues from high disposal quantities and maximize quantities diverted from disposal.

It now seems likely, however, that this independence has been achieved by the decision of the provincial government to take over disposal responsibility.

The remaining issue, then, is whether the Office should be established in the Works Department or as a separate body within the Metro administration. The Task Force suggests that this issue be decided as soon as possible by the Metro administration. Options include:

. a new department, reporting to either Works Committee or a new committee of Council

. an office reporting to the Chairman or CAO

. a division within the Works Department

The Task Force is not in a position to recommend one option over another, since no examination has been made of the over-all Metro management structure.

Recommendation:

20. That the Metro Waste Reduction Office be situated in the Metro administrative structure in such a way as to ensure it's ability to fulfil the mandate outlined below.

For the MWRO to be successful in operating the large-scale program recommended here, there must not be duplication or interference from other bodies. The greatest potential source of such a problem is the new provincial authority. This is because current planning by MOE officials would give the authority a mandate potentially including operation of recycling programs. It is essential that this source of potential confusion be eliminated and the situation clarified as soon as possible.

Recommendation:

21. That Metro Council ask the province to ensure that legislation establishing the new provincial waste disposal authority limits the mandate of the authority to selecting and operating the GTA landfills.

8.2 Mandate of the Metro Waste Reduction Office

Regardless of its placement within the Metro administration, the Task Force recommends that the MWRO perform the following functions.

. Policy development

This would include development of future 3Rs programs, development of approvals process, liaison and co-ordination with other governments and related matters.

It is suggested that a multi-sectoral advisory body be created to assist in this area.

. Procurement

Co-ordination of all Metro purchasing decisions which have a bearing on waste reduction.

. Public education and information services

Waste reduction measures, toxics use reduction and related matters.

. Technical assistance for the ICI sector

This would include administration of generator and hauler registration programs, assistance with design and implementation of separation programs.

. Enforcement

Investigation, warnings, and prosecution of non-compliance with the Metro Waste Reduction By-law.

. Operations

Receipt, processing (both MRF and compost), storage and delivery of recyclable materials. Marketing is described in more detail below.

Operation of re-use programs.

Household hazardous waste.

. Community-based siting

Support services for the Metro Steering Committee described in Section 9 below.

Recommendation:

22. that a Metro Waste Reduction Office be created with the following mandate;

- **policy development**

- **co-ordination of procurement**

- **public education, information and consultation**

- **ICI technical assistance**

- **waste reduction by-law enforcement**

- **operation of a recycling and composting program**

- **marketing**

8.3 Marketing

All of the above functions, with the exception of marketing, are either self-explanatory or are discussed in more detail in other places in the report.

A marketing and delivery program capable of accommodating the expected volume of approximately 1.3 million tonnes per year would be operated by the Metro Waste Reduction Office. It would have three primary components:

- working with other governments to expand markets for recyclable materials through regulatory and fiscal measures

- stimulating consumer demand

- actively seeking out markets on a continental and global basis

The success of this marketing program is critical for the entire program. The quantity of materials put out to market will increase from something like 150,000 tonnes in 1990 to almost 10 times that amount in 1993. Although some inventory storage capacity is recommended for 1993, if markets are not available the bulk of that material will have to go to disposal.

The discussion which follows outlines existing Metro marketing under the Blue Box program and implications for expansion on the scale envisaged here, discusses potential longer-term problems and provides an outline of a suggested marketing program to be implemented by the MWRO.

8.3.1 Expansion of present Blue Box marketing

a) 1990 Blue Box quantities

55,220 tonnes newsprint were sold to Quebec and Ontario paper in 1990. Given the move toward increased use of recycled newsprint it does not appear that marketing some four times this quantity, as recommended here, would provide any great problem.

12,267 tonnes glass were sold to Consumers Glass in 1990. Like newsprint, it does not appear that an increase to something like 60,000 tonnes in 1993 would be difficult for the buyer.

As set out above in Section 6, Storage, the market for metals, plastics and aluminium and steel cans appears to be sufficiently elastic to accommodate the quantities projected for 1993.

b) Other materials

There is sufficient demand for fine paper, cardboard and wood to handle the projected 1993 quantities of those two materials. Some storage may be required to accommodate the supply increase in available supply and thereby give the market time to absorb these increased quantities.

compost

While compost does not have nutritive values which allow it to be marketed as a soil fertilizer, it does enhance the plant growing abilities of soil. This allows marketing to such potential users as :

. sod-growers
. nurseries
. landscapers
. municipal parks departments
. agriculture
. silviculture

In addition, compost should be made available to home-gardeners within Metro, as a reward for participating in the 50% program.

Compost can be marketed both as preferable alternative to chemical fertilizers, since it provides for slower release of nitrogen, and, through its water retention properties, as a means of reducing run-off and erosion problems.

Metro will be looking to dispose of something like 300,000 tonnes a year, which could probably not all be accommodated by relatively small-scale users such as nurseries and landscapers. Agriculture can accommodate the greatest volumes but there is a difficulty in that some farms are no longer equipped to spread manure or soils. It is suggested, therefore, that Metro develop a program to provide compost to farms are low cost and investigate ways of assisting with spreading.

8.3.2 Ensuring a market for recyclable materials

The marketing program to be established by Metro must do more than simply provide for markets in 1993. It must also work to expand markets beyond that to allow further increases in diversion. There are two major ways of doing this: (1) stimulating consumer demand for products made from recycled materials, and

(2) regulatory and fiscal measures to provide manufacturers with incentives to move from virgin to recycled materials.

Regulatory and fiscal measures will by and large determine the market for recyclable materials. In the absence of waste regulation there would be almost no market for recycling, other than some metals. Wastes would be disposed of at low cost - with resulting human health and environmental damage - which means that recycling could not compete with disposal as an option. Private sector recycling activity in recent years has been stimulated by disposal prices increases.

What is needed, therefore, for successful marketing, is an extension of regulatory activity from disposal regulation to use of recyclables in the manufacturing process. This must be done by the province,however, not Metro.

An example of such regulation is the measures passed by a number of American states requiring that a certain portion of newsprint used by newspapers be recycled. The City of Toronto is attempting to introduce a similar requirement, using its authority over vending boxes on City streets.

Fiscal measures are two kinds:

- elimination of incentives and subsidies for use of virgin materials, such as subsidies to the forestry industry for pulp production using new trees,

- provision of incentives for use of recycled materials and disincentives for use of virgin materials; eg, taxes or surcharges on virgin materials, sales tax exemptions for recycled materials

The Metro marketing program should both encourage the federal and provincial governments to introduce such programs and play a co-ordinating role.

At the same time, Metro should directly attempt to stimulate consumer demand (eg use of recycling symbol; advertising etc).

Finally, the Metro program should actively seek markets in Canada and elsewhere.

Recommendation:

23. That Metro Council request the province, to assist in developing markets for recyclable materials, to phase in regulatory requirements for use of recyclable materials in manufacturing processes and to provide fiscal incentives for their use.

Success of Metro reduction and re-use programs will depend upon regulatory action taken by the province.

Recommendation:

24. To assist in re-use programs of the MWRO, it is recommended that Metro request the province to phase in regulatory requirements that all beverages be sold only in re-usable containers.

9 The Fifth Principle: Community-based Decision making for Waste Reduction.

9.1 Introduction

9.1.1 The Need for a New Infrastructure

Metro Toronto does not currently have in place the waste management systems and facilities needed to divert 50% (or 1.3 million tonnes annually) of its waste stream from the disposal option. If the 50% target is to be met, the infrastructure must be put in place to enable residents, businesses and institutions to rely on reduction, reuse and recycling as the primary means of managing their wastes.

This infrastructure will have to include new kinds of facilities to collect, process and market recyclable materials. One key decision which will impact on the type number and capacity of facilities that are needed in Metro is whether or not Metros planning will be based on "two stream " or "three stream" approach. The two stream system requires generators to separate wastes into "wet" and "dry" materials. The dry materials include all recyclable or reusable materials that are separated at source from all other wastes. Each stream is sent to a different processing facility. The "three stream" system would involve source separation of wastes into three categories: identified recyclable and reusable materials such as blue box materials; compostable organic material; and wastes which must go to disposal.

Experience in European jurisdictions and in a current pilot project initiated by the City of Guelph, Ontario indicates that the Wet/Dry approach quickly achieves high diversion rates of over 50% Some observers, however, including Ministry of the Environment staff, have raised concerns that the two stream approach may involve greater environmental risks because the wet stream co-mingles a wider variety of types of wastes than the three stream system. For this reason, it appears that MOE is moving in the direction of requiring slightly more stringent approval requirements for wet/dry facilities than for facilities which are required as part of a three stream approach.

In the case of Metro, the Task Force recommends that a decision be taken to commit to putting in place facilities based on a three stream approach. This approach has the advantage of greater reliance on source separation and on the less complex, more proven technology of composting facilities. Moreover, the required facilities seem likely to receive approval more expeditiously than wet/dry plants, an important consideration given the short time frame for putting in place the necessary facilities.

Recommendation:

25. That Metro Council adopt a three stream collection system - wet, dry and garbage - and planning of the waste reduction infrastructure be based on this approach.

If this approach is adopted, there will be an immediate need to establish two types of facilities: material recovery facilities (MRFs) and community or large scale composting plants. These are discussed in more detail below.

Material Recycling Facilities (MRF) MRF is a generic term that can be defined as a facility designed to maximize reuse, reduction and recovery from the waste stream. These facilities can include components for sorting, upgrading and preparing a wide range of materials for reuse and recycling. In addition, these facilities could include sections for processing and screening mixed wastes to recover useful materials prior to landfilling, and for composting organic material. For the purposes of this report, it is assumed that the later to functions are not included in MRFs. Processing mixed wastes is only required in the two stream approach, and composting facilities are treated as separate facilities discussed below.

Metro has initiated planning to establish two MRFs through its SWEAP process : a "dry waste processing MRF" which is designed to sort and prepare dry recyclable materials and direct these to available markets; and a MRF to process construction and demolition waste. In addition Metro is proposing to establish a composting facility to process and cure organic wastes to make these suitable for application as a soil additive. All three facilities would be designed to a capacity which allows 190 tonnes per day of materials to be delivered to the plant. This capacity was chosen to ensure the plants fall within an informal MOE policy to require a full environmental assessment of processing facilities which generate over 200 tpd of residue. (As noted previously, there is still some confusion over whether the 190 tonne per day day figure refers to input or residue which must go to disposal. In the latter case, input, at 80% efficiency, would be close to 1,000 tonnes per day. This point should be clarified).

These facilities will not provide sufficient processing capacity for the 50% diversion program recommended here and other facilities will for that reason be needed. In additional, as discussed above, storage capacity will also be required.

Composting Plants Composting plants will also play a key role in the new infrastructure, since home composting cannot accommodate more than a third of the total quantity of compostable material generated each year. These facilities are designed to treat that part of the waste stream which is biodegradable and can be reconditioned for use as soil conditioner.

9.1.2 The Need for a New Approach

As discussed below, experience indicates that traditional approaches to waste management which rely on large scale waste disposal projects and a top down planning and approvals process, will not work in the face of a growing waste crisis. Large scale waste disposal options such as landfilling have proven to be next to impossible to put in place due to wide spread public dissent and resistance which arises during the approvals process for such facilities. Municipal proponents have utilised a top-down site selection process rather than seeking consensus by establishing a meaningful role for the effected community in decision making. The result has been that only one municipal landfill site has received approval under the Environmental Assessment Act in the past ten years.

Metro does not have the time to wait for large scale facilities to work their way through the existing approvals process, and cannot risk carrying through with a waste strategy which does not have broad-based community support.

The delays and ineffectiveness of the traditional approach and the pressing need for immediate action to stave off the impending crisis suggest the need for a new direction which mobilizes the community and breaks away from old patterns of failure. Creative strategies must be adopted to established a waste reduction infrastructure in a fair, timely, and environmentally sound fashion. This chapter sets out a strategy for putting in place the necessary systems and facilities to meet the target of 50% diversion by January 1, 1993.

9.2 The Existing Process Approvals

9.2.1 Existing Approvals Requirements

The approvals process for waste management facilities is administered by the provincial government. Most facilities require approval under the Environmental Assessment Act (EAA) as well as the Environmental Protection Act (EPA). In addition land use planning approvals may be required pursuant to the Planning Act, 1983.

EAA Approval The Environmental Assessment Act applies to virtually all major waste management projects. All public sector waste projects are subject to the Act unless exempted by the Minister of the Environment in consultation with the Ontario Cabinet.

Although private projects are not automatically subject to the EAA, Cabinet can "designate" that an undertaking be subject to the Act by passing a special regulation pursuant to the Act. The Ministry has developed an informal policy for designating private sector waste projects of a significant size. The policy

requires that all proposed landfill sites with a capacity of 40,000 cubic metres or more will be designated under the Act.
Other processing or treatment facilities such as composting plants are also be subject to the Act under this policy if the proposed facility is designed to send more than 200 tonnes per day of residue to disposal.

If the EAA does apply, the proponent of the waste project is required to undergo a rigorous and usually very lengthy approvals process which includes:

extensive public consultation;

the preparation of an Environmental Assessment document which

(1) describes the purpose and rationale for the undertaking,

(2) identifies and evaluates the environmental impact of alternatives to the undertaking, alternative methods of carrying out the undertaking and the preferred alternative, and

(3) weighs the advantages and disadvantages of all of these alternatives in arriving at a preferred undertaking;

government and public review of this document;

and in most cases a public hearing before the Environmental Assessment or Joint Board.

The practice has been to require most proponents of waste projects which are subject to EAA, and in some cases even those exempt from the Act, to carry out a systematic process of elimination to identify a site upon which the project will have minimal environmental impacts. This process has proven lengthy and rancorous. Some have argued that the process itself has significant negative social and community impacts. In virtually all cases this process has proven to be disruptive and controversial for members of the affected communities. The amount of time, expense and uncertainty associated with the process, and the fact that only one landfill has been approved under the Act since it was first applied to municipal landfills in 1980 have led waste facility proponents to raise serious concerns about the viability of the Act.

Although the provincial government is currently in the midst of a comprehensive review of the EA process aimed in part at improving its administration and eliminating undue delays, the waste reduction programme proposed herein cannot await the outcome of this review. Given the experience under the Act, and the short time frame for action in waste reduction, it does not appear to be feasible to impose full EA requirements on the recycling and processing facilities required to achieve the recommended waste reduction objectives.

EPA Approvals All waste management facilities must be licensed under Part V of the Environmental Protection Act. The Act establishes that Certificates of Approval are required for the use, operation, establishment, alteration, enlargement, or extension of any "waste management system" or "waste disposal site". A public hearing is required in the case of sites which dispose of " the equivalent of the domestic waste of not less than 1500 persons".Smaller facilities may also require a public hearing at discretion of the Director of Approvals Branch of MOE. The Ministry currently has a policy to require a hearing if:

a request is made by the Municipality within which the site is to be located;

a significant number of public requests are received; or

the proposed use of land is inconsistent with official plans and zoning by-laws

In addition, the Minister of the Environment has a special power to issue Certificates of Approval under the Act with out a public hearing in "emergency situations".

Facilities which do not handle wastes, including those which only handle recyclable materials as defined by Regulation 309 under the EPA are exempt from the requirements of Part V of the Act. Most off site sorting or recycling facility will involve at least some handling of non recyclable materials and consequently would not be exempted under this definition.

If Part V applies to a proposed facility, the applicant must submit the Ministry all plans and specifications of the proposed waste facility as well as any supporting studies, reports or other materials which the Ministry views as necessary to demonstrate that the proposed facility can operate safely. Once the Ministry has reviewed these documents it must decide whether a hearing is required under the Act. The Ministry or the Environmental Assessment Board then decided whether or not and under what conditions a Certificate of Approval should issue.

The time required to obtain Part V EPA approvals can vary from a few months to years depending on the nature of the proposal. quality of the application, and level of community concern. Members of the public can easily feel shut out of the process due to inadequate attention to community involvement and consultation, and the technical nature of issues involved. This can lead an adversarial relationship - confrontation between the proponent and others in the community - which grinds the process to a halt.

Other Approvals Approval under a number of other pieces of legislation may also be required for a 3Rs facility. For example, the proposal may require an amendment to the municipal official plan or zoning changes pursuant the process established under the Planning Act, 1983, or expropriation of private property under the Expropriation Act.

9.2.2 Proposed MOE Changes In Approvals

In February 1991, Ruth Grier, Minister of the Environment announced a series of proposed changes to the approvals process for "3Rs" projects designed to "make environmental approvals for waste recycling facilities more efficient while retaining essential environmental controls. The proposal categorized these facilities into to categories:

(1) On-going manufacturing and other processes that employ recyclable materials instead of raw materials would be exempt from part V EPA approvals.

(2) Facilities which receive source separated materials for additional sorting, processing or other treatment prior to use as recyclable materials would be approved by "Permit by Rule" provisions established by the MOE. The Ministry would develop rules for composting, sorting and other facilities. If a site could comply with these rules, EPA approval would not be required. "Community involvement in decision making" would be incorporated into this process. The newly created MOE waste reduction office is currently involved in the development of the Permit by Rule approach. One proposal is to develop rules for siting as part of the Permit by Rule.

Full approval would still be required for facilities which received mixed wastes for storage, treatment, sorting or other activities prior to disposal, reuse, or recycling.

The MOE proposal, and in particular the permit by rule approach requires further detail to be fully understood. The Minister has cited blue box sorting and composting facilities as candidates for the Permit by Rule process. She has not however provided a clear indication of how these rules will be developed, how the public will be involved, what issues the rules would address. Although the Minister has committed to "community involvement in decision making" as a feature of locating these types of facilities, there have been no details on how that decision making process would work. Most importantly, the Minister has yet to set a deadline for putting the rules in place.

Any such approach must guarantee a public right to an EPA-type public hearing before the Environmental Assessment Board.

The Task Force suggests that Metro encourage the province to proceed with development of this approach.

Recommendation:

26. That Metro Council request the province to immediately implement a "Permit By Rule" approvals system, with provision for public hearings, for compost and recycling facilities.

9.2.3 Conclusions

The siting process for waste management facilities in Ontario has proven to be expensive, time consuming and frustrating for both the proponents of these facilities and the public.

Many of these problems arise from the nature of the siting and approvals process as currently practised in Ontario. The traditional approach has failed in two crucial ways: it has focused on approval of large scale disposal rather than seeking out smaller scale 3R solutions: and it has failed to effectively seeking out and building upon community consensus.

Focus on Large Scale Disposal Options

The Environmental Assessment Act is intended to ensure that the full range of waste management alternatives are considered, and that solutions are selected which minimize long term environmental effects and promote the wise management of environmental resources. In practice, this has not ensured that waste reduction is the focal point of waste projects, since proponents tend to focus on the large scale waste management projects with potentially significant negative impacts such as landfill. The 3Rs tend not to be the centre point of most waste plans, but extra trimming which proponents add on to ensure approval of the large scale undertaking for which approval is being sought.

Failure to obtain community support

The traditional approach to site selection has tended to result in the imposition of a preferred site on a community through a systematic top-down process of elimination. The effect of this approach is to create increased local resistance as the site search narrows to a few candidate sites. Host communities have viewed the results of these processes as arbitrary and unfair. The effected community have felt shut out of the decision making process due to the technical nature of the issues surrounding the establishment of these facilities, and the failure of proponents to establish a meaningful role for community members at crucial decision points. Finally, by the time the preferred site is chosen, the community in the immediate vicinity has become polarized against the proposal, and is preparing a strategy to defeat the project.

Proponents have viewed the process as unduly lengthy and expensive. In most cases the process boils down to an adversarial public hearing with participants polarized around fundamental unresolved issues.

The Provincial Government, as discussed, is now proposing a more streamlined process for 3R facilities. Yet, even in the case where the EAA does not apply, the approval process for sorting, recycling and composting facilities is potentially lengthy and controversial.

Experience with the siting of landfill sites in this province indicates that timely establishment of material recovery or composting facilities cannot occur without broad community acceptance. Removing the right to a public hearing will not address the underlying problem of the failure of the existing siting and approvals process to build on community consensus.

The widespread public support for 3Rs solutions and public recognition of the growing crisis in the Metro area provides both the province and Metro with an opportunity treat Metro as a test case for an improved approvals process based on community consensus.

9.3 The Community-based Approach.

The community-based approach is intended to reverse the trends of public frustration, paralysis in the approvals process, and failure to fully utilize low scale, environmentally sound alternatives to large scale waste disposal outlined above.

The principle of community based decision making begins with the proposition that local communities, to the fullest possible extent, should shape the solutions to Metro Toronto's waste management crisis. The approach involves structuring a process to give defined communities within Metro, such as ratepayer associations, environmental interest groups, local business associations, and church groups direct responsibility for the planning and development of 3Rs solutions, beginning at the earliest stages.

The approach is based on the premise that community groups, are willing and indeed recognise their responsibility to take a lead role on building consensus around a community based waste plan. It assumes that fully apprised community leaders and members will accept facilities which are part of an overall plan to reduce Metros waste provided that the community is fully and meaningfully involved in the planning, design and ongoing operation of these facilities.

The central assumption is that the only way out of the waste crisis is to put responsibility, to the fullest extent possible, back in the hands of the community that generates the waste. If communities understand that the waste diversion targets must be met and that they, as the waste generator, have primary responsibility for meeting these targets, they will work toward immediate solutions.

There is now at least one precedent for this approach. Citizens for a Safe Environment(CSE), a citizens group in South Riverdale has proposed that a small scale composting plant be located within its community, provided that community members are given control over the process. CSE has proposed that their participation in a community siting process would be under the following conditions:

. as a starting point, an educational process which would familiarize participants with composting technologies

. a grant to hire a consultant to assist in providing the group with technical advice on issues of concern

. extensive community consultation and modifications to address public concerns

. a guarantee that the project would be rejected if there was not general public acceptance

. technical issues would be resolved jointly by expert Metro and community experts, directed by a joint Metro/community steering committee.

. this joint steering committee would set the operating parameters for the site, exceedance of which would lead to closure of the plant until the cause of the failure had been corrected

. the community would play an ongoing role in the operation of the facility by way of a community liaison committee with complete access to plant records and a mandate to address community concerns related to plant operation

. community participation and consultation would be funded by Metro

. opportunities would exist for employment of community members in staffing the facility

As a starting point, local residents have formed a steering committee for the siting of the facility, and has made a proposal to Metro for funding to carry out a community consultation and information gathering and sharing. Documentation related to this initiative is included as Appendix 3, following.

Not all aspects of the needed 3Rs infrastructure are suitable for the community-based approach. For example, the new infrastructure will require larger sorting, transfer and waste exchange stations, and transportation networks to facilitate the movement of reusable and recyclable materials to markets outside a given community. Economies of scale may dictate the need for MRFs and composting plants as well as interim storage facilities which serve more than one community. However, these larger facilities stand the best chance of gaining community acceptance if their need arises from community-based planning and after fully utilising at source 3Rs and small scale community facilities as preferred solutions.

Recommendation:

27. That Metro Council use a community-based approach to plan, design, site and construct compost and recycling facilities by 1993. That approach should include the following elements:

. each community must take primary responsibility for reducing or diverting 50% of its waste from disposal by January 1, 1993;

. each community must honour the waste management hierarchy by focussing first on methods of reducing the amounts of waste generated;

. small scale and local waste diversion methods of reduction, re-use and recycling, and small scale community composting facilities shall be exhausted before proposing larger scale inter-community facilities;

. for each community, waste reduction methods must be developed through consultation across the whole community;

. within each community, all sectors must be equally responsible for meeting waste diversion objectives, including apartment and single family dwelling residents, commercial enterprises, institutions, and industry.

. Metro should provide necessary financial resources to community steering committees to hire staff where necessary for community planning;

- **although the over-all Metro-wide plan for a waste diversion infrastructure should be co-ordinated and approved at the Metro level, it must be based as far as possible on the plans developed by each community;**

The next section sets out a proposed planning and decision making process to implement the above principles.

9.4 The logical progression from SWEAP to a community-based siting program

Section 9.5, below, sets out a proposed new approach to siting waste recycling facilities in Metro. The Task Force does not mean to suggest, however, that the existing SWEAP process should be abandoned, nor that the time and money spent to date have in any way been wasted.

As set out in the following the section, the community-based approach differs from SWEAP primarily in that it places more emphasis on local community initiatives. Since SWEAP itself differs from previous siting methods by providing greater opportunity for public access than had been the case prior to 1987, the community-based approach is simply a further step in the same direction.

It is suggested that Metro continue with the SWEAP method for siting the three facilities presently under consideration - the commercial MRF, construction and demolition demolition MRF and compost facility. All other facilities should be sited using the community-based approach.

During the past year the SWEAP program has carried out a search for sites for three facilities:

1) a 190 tonne per day input compost facility
2) an MRF, type unspecified
3) an EFW facility

As set out above, Metro Works Department now intends that the SWEAP process should result in selection of sites for:

1) a 190 tonne day compost facility
2) a commercial MRF
3) a construction and demolition MRF

One other siting process, for a residential MRF, is being carried out independently of the SWEAP process.

The SWEAP process consists of the following steps:

1. Establishment, through public consultation, of site selection criteria.

2. Through advertisements, a call for interested parties to offer possible sites.

3. A review of all potential sites within Metro.

4. Based on steps #2 and #3, development of a long list of potential sites. This list is not made public.

5. Further refinement, through public consultation, of site selection criteria.

6. Development and publication of a short list of potential sites.

7. Finalization, through public consultation, of site selection criteria.

8. Selection of sites and submission of applications for approval to MOE.

9. When designed, it was anticipated that the SWEAP process would culminate in an application for both EPA and EAA approval.

This is contrasted with the community-based approach, described in more detail below, which in essence consists of the following steps:

1. Delineation of the boundaries of all Metro communities, including both residential and ICI generators, followed by an appeal to all such communities to plan for 50% reduction or diversion of the waste they generate. Metro would not make any decisions on number or capacity of facilities to be sited at this stage.

2. Establishment of a three-tier co-ordinating structure to allow these community plans to be merged into one Metro-wide plan. The structure would

consist of:

. community planning committees
. area municipality co-ordinating committees
. Metro steering committee

3. Development of the community plans, followed by development of the Metro-wide. It is at this stage that decisions on numbers and capacities of facilities would be made.

4. Selection of sites and submission of applications for approval to MOE.

5. The MOE approvals process would consist of "permit by rule", with provision for an EPA-type public hearing, but without either formal EPA or EAA approval.

The SWEAP approach can be described as "top-down" (Metro decides what facilities it needs and then begins to look for sites) with public consultation.

The community-based approach can be described as "bottom-up" (communities decide what contribution they can make to the over-all effort, after which Metro decides what facilities it needs).

Recommendation:

28. That Metro continue to use the SWEAP siting process for the three facilities presently in process and use the community-based approach for all other 3Rs facilities.

9.5 Steps in the proposed siting program

The community-based siting program would involve specific roles and responsibilities at three levels: (1) community planning, relying on existing bodies such as ratepayer associations, church or school groups or others, assisted by newly established community planning committees; (2) area municipalities, through area municipality co-ordinating committees; and (3) across Metro wide by a Metro steering committee.

The plan would be carried out in three phases of six months each. The first phase would consist of establishment of the co-ordinating structure and community-level planning. Phase 2 would consist of development of the Metro-wide plan, preparation of applications for necessary approvals and initiation of activities which do not require approval. Phase 3 would consist construction of approved facilities and public hearings for any facilities for which there are unresolved issues or disputes. The steps to be taken in each of these phases are set out below.

PHASE I DEVELOPING COMMUNITY BASED STRATEGIES

Step 1 Announce the Waste Crisis and the new approach. (July 1991)

Although Metro has been moving toward a waste crisis for a number of years, a statement of imminent emergency has not yet been issued by Metro Council. In order to mobilize communities to share responsibility for solving the crisis, the Metro Chairman and Council should publicly declare such an emergency to exist and explain the measures required for Metro to move immediately to divert half its waste.

The statement must also serve notice that Metro is adopting a new approach which gives primary responsibility and decision making authority to local communities to put in place a plan for meeting the 1993 deadline, with full support and co-ordination to be provided by Metro.

Step 2 Identify Local Communities. (July, 1991)

Metro, in consultation with local municipalities, would be responsible for defining the communities across Metro based on such things as existing planning divisions and school catchment areas.

Step 3 Put in place the planning structure (July, 1991)

Community planning committees, comprised of groups and individuals from residential and ICI sectors, would be responsible for developing a community strategy with specific proposals to meet the 50% target. Area municipality co-ordinating committees would assist in coordinating planning at the city or borough wide level.

The Metro steering committee would be composed of Metro Councillors and staff. During the first phase of the plan this committee would be responsible for assisting the community planning process, for instance by providing funding to hire local facilitators. During the second phase, this committee would be responsible for finalizing a Metro wide plan and obtaining approval for the Metro facilities required as part of plan.

Step 4. Developing community waste diversion strategies. (July -December,1991)

a) community education and consultation (July - September) With funding from Metro, community planning committees would retain facilitators to (1) hold public open houses to review diversion targets and options, and (2) consult with all sectors on options.

b) development of strategy (October to December) After extensive consultation within the community and coordination with other communities through the City wide steering committee, each community steering committee would be responsible for submitting a community strategy to the Metro coordinating committee. Each plan would indicate the amount of waste to be diverted from landfill within the community by way of (1) at source reduction, reuse and recycling including on site composting facilities for ICI sector, (2) small scale community composting facilities, and (3) shipment of materials to larger MRFs or other 3Rs facilities. The plan would also indicate whether or not it would be a host community for a larger facility.

1.2

c) Community negotiations to identify location of Metro wide facilities (October - December) Using the vehicles of the Area municipality and Metro-wide committees, community planning committees would develop co-ordinated proposals for waste materials which must move outside the community. This will involve trade-offs among communities. Those which do not become host communities must be willing to compensate those who do. Following negotiations among community planning committees, community waste diversion strategies must indicate the proposed destination of waste stream materials which leave the community.

Step 5. Facilitating Waste diversion activities

While communities are developing waste diversion strategies, Metro should carry out an aggressive reduction and reuse programme which focuses on small scale, locally-based facilities and at source diversion systems. The approach should to minimize the movement of waste away from the point of generation. This means expanded efforts by Metro to encourage reduction and reuse at source. For residential wastes Metro must immediately: (1) provide all residents with home composters;(2) expand its educational programs to assist residents in developing strategies to reduce and reuse. For the ICI sector, Metro must step up efforts to assist businesses in developing reduction and reuse strategies; aggressively seek out opportunity for closed loop waste streams within certain industries. For example, the Ontario Food Terminal is developing system whereby wastes generated in the processing and retailing of farm produce is returned to the farmer as organic fertiliser. Systems such as these which are self contained will greatly reduce the need for large scale centralised composting and material recovery facilities.

Step 6 The provincial government develops a Permit by Rule system for small scale community facilities. (June 1991 - December 1991)

As proposed in February 1991, the provincial government should develop specific regulations for 3R and composting facilities. (See Section 9.2 above).

PHASE II DEVELOPING THE METRO WIDE WASTE DIVERSION PLAN

Step 7 Metro takes over lead responsibility for coordinating and implementing the plan (January,1992)

At this point in the process, responsibilities are split between the community planning committees and the Metro steering committee. The Metro committee would take on the task of coordinating the community strategies and make the final determination of the types, number and location of larger facilities which would require MOE approval. The local planning committees are given responsibility for advancing all waste diversion activities carried out within the boundaries of the community including programmes to reduce, reuse and recycle at source, and the establishment of small community 3Rs facilities which do not require provincial approval

Step 8 Community planning committees implement intra community components of the waste diversion strategies. (January - December 1992)

Each community planning committee, funded by Metro, is responsible for overseeing the implementation of all aspects of the waste diversion strategy which are to be carried out entirely within that community. Small scale recycling facilities would be subject to the Permit by Rule regulatory system.

Step 9 The Metro steering committee develops Metro wide components of the overall plan. (January, 1992)

The Metro coordinating committee would review all waste diversion strategies and develop the Metro wide components of the plan. Based on the community plans, the committee would identify transportation routes, number and daily tonnage capacity of needed 3R facilities.

Step 10 The Metro steering committee identifies sites for centralized 3Rs facilities and prepares applications for approval. (January - June 1992)

Metro would then identify the location of all planned Metro 3Rs facilities and carry out all site specific investigations required to complete applications for approval.

Step 11 The provincial Ministry of the Environment establishes the Metro Waste Reduction Task Force within Approvals Branch. (By January 1, 1992)

MOE should establish a special dedicated working group within Approvals Branch with a mandate of providing a streamlined one window review and approvals process for Metro 3R facilities. This task force would provide assistance to Metro in the developing and refining its applications for approval, and facilitate timely government review of these applications.

Step 12 Metro and Community Planning Committees announce Metro wide Waste Diversion Plan (May 1, 1992)

Metro Council together with representatives of each of the community groups announce the details of the overall plan including the proposed location of 3R facilities to serve all of Metro.

Step 13 Identification of outstanding issues. (May - June 1992)

Working with community steering committees, Metro identifies and seeks to address outstanding issues and disputes for each of the proposed Metro wide facilities. For facilities which do not require hearings, and for which outstanding concerns have been resolved, the provincial government should make a timely decision on approval.

PHASE III PUBLIC HEARINGS AND CONSTRUCTION OF APPROVED FACILITIES

Step 14 Notice of Public Hearing (June 1, 1992)

Notice issued for public hearings for each proposed Metro facility which requires a hearing, either pursuant to section 30 of the Environmental Protection Act or as a result of unresolved issues and disputes.

Step 15 Begin construction of approved facilities which do not require public hearings. (June - December 1992)

For all 3R facilities which do not require public hearings and for which approvals have been issued, Metro should begin construction immediately and bring these facilities on line as soon as possible.

Step 16 Commence public hearings before the Environmental Assessment or Joint Board. (September 1992)

It is anticipated that hearings could be completed in three months.

Step 17 Construction of all facilities which receive approval from the Environmental Assessment or Joint Board. (1993)

If construction can be completed within six months, the facilities would be in operation by July, 1993.

As discussed, under this process Metro would not not attempt to specify at the outset the number and types of composting plants, MRFs, storage and transfer stations and other facilities which will be required as part of Metros overall waste diversion infrastructure. These decisions would be made as part of the community- based process.

This approvals process needs to be developed in more detail, particularly in terms of such things as the legal right to a hearing, form of that hearing, and legal status of the approval given. These issues are being addressed by MOE and there would be benefit form a parallel, multi-stakeholder consultative process. In the following Part it is suggested that Metro convene a study group to consider public and private roles. It would also be useful to have such a group examine these types of issues related to community-based siting.

Part C. Resolving an Essential Issue

The Task Force, during its deliberations, identified and discussed at some length an issue which is of vital importance to the success of the Metro program recommended here - the extent to which collection, sorting, storage and marketing of recyclable materials should be a public or private responsibility.

This is a difficult and complex subject. The Task Force does not advance specific recommendations, other than to point to the importance of the issue and to suggest that Metro convene a study group, with representation from all stake-holders, to explore the issue in more detail.

This Section, accordingly, provides a discussion of the underlying principles and issues but does not advance specific recommendations.

10. Public and private roles

Solid waste management services in Metro are provided by both the public and private sectors. Area municipalities collect residential waste which is disposed of by Metro. Metro also disposes of commercial, industrial and institutional waste which is collected by private waste management firms.

The existing system of shared public and private responsibility is called into question by the shift from waste disposal to waste reduction, re-use and recycling. Large capital investments are required for a recycling infrastructure capable of handling more than 1.2 million tonnes a year. During the past year, private firms, such the WMI MRF facility in Etobicoke, have started to make such investments. In February of this year, the Metro Works Commissioner recommended expenditure of $50 million on recycling plants.

If present trends continue both Metro Works and private firms will be operating recycling facilities. This leads to several issues which must be addressed:

a) Will the private sector be asked to compete with subsidized public-sector services offering the same service at a lower price?

b) Will Metro or private firms be able to secure sufficient raw materials, in the form of sorted waste materials, to generate operating revenues sufficient to help reduce capital and operating costs? In other words, will the financial viability of recycling be undercut by having too many players? As discussed above, this issue applies also to the role of the new provincial authority.

Criteria

Possible criteria for addressing these issues include:

1. All public policy waste reduction decisions must be based in the first instance on the objective of environmental protection through reduction of pollution impacts and resource consumption associated with solid waste generation and disposal. This must be done by implementing the hierarchy of:

- waste reduction
- waste re-use
- waste recycling

before disposal is considered.

2. True cost accounting for waste disposal and waste management, defined as incorporating both future cash costs and environmental non-cash costs, must be followed to provide an incentive for waste reduction (not generating waste in the first place). That incentive will only have an affect on waste quantities if those costs are passed on to the waste generator. Thus one important criteria for evaluation of waste policy options is the extent to which costs are passed directly and in a visible back to the waste generator.

3. Implementation of these principles may result in significant revenues from waste disposal and waste management. Those revenues:

a) should go to public rather than private benefit and should be spent by public bodies on environmental protection

The rationale for Principle #3 is as follows:

a) because the revenues exist only because of public policy decisions, and not from the workings of the free market, they should flow back to public and not private bodies

b) waste generators will accept these increased costs much more readily if they know they are being used directly for environmental protection rather than being funnelled into general government revenues and expenditure

4. Conversely, it could be argued that recycling revenues result from changing values and therefore markets and are therefore legitimate objects of private sector activity, like any other manufacturing and marketing function.
The rationale for such a principle is that efficiency and cost-effectiveness results from competition amongst private sector recyclers.

For convenience, the discussion is divided between collection - a function not performed by Metro now - and sorting, storage and marketing.

10.1 Collection of sorted materials

Options

At present area municipalities collect residential waste and private haulers collect commercial, industrial and institutional wastes. Under the program proposed here by the Task Force, by 1993 approximately half of those wastes will go to landfill disposal while the other half will be, in some cases, further sorted, stored and marketed as recyclable materials.

In the document titled CUPE' s Program for Promoting Waste Reduction Within Metro and its Area Municipalities the recommendation is made that "municipal governments within Metro - perhaps in cooperation with Metro's Works Department .... should set up a publicly owned, operated and staffed bulk collection infrastructure (i.e., bulk collection trucks, containers, sorting facilities and storage depots) to pick up the used materials from the industrial and commercial waste stream." (cite) Thus CUPE recommends that a public collection system be established which would operate in competition with existing private waste haulers.

The OWMA, on the hand, in a memorandum to the Task Force dated April 15, 1991, has stated that "as a general principle, this association is against the establishment of public owned and operated recycling facilities and the attendant flow control of waste necessary to make them viable." The OWMA also disagrees with the suggestion set out above that recycling markets only exist because of public policy.

This issue of whether or not any change should be made in the existing collection system is very important. In the same way the issue of any potential change in recycling of used materials is of key importance.

The following options can be considered:

Collection:

No change in status quo - thus collection of residential by municipal forces and remainder by private sector.

CUPE proposal - status quo plus a municipal collection and recycling agency

All public - legislation provides that only municipal forces will collect and recycle all wastes

10.2 Marketing of sorted materials

Similar options are available for the recycling activity, which consists of sorting, storing and marketing:

no change in status quo - thus recycled materials generated by the residential sector would be recycled by municipal forces, while those from commercial, industrial and institutional sources would be recycled by private sector firms

CUPE proposal - status quo, plus a municipal recycling body which would operate in competition with private sector recyclers

all public - legislation would require that recycling be done by a public body, with collection either done by the same body or by existing private and public forces

Again, there are pros and cons associated with each.

10.3 Funding the infrastructure proposed here

Outlined in this report is the need for a much expanded recycling and composting infrastructure. The estimated costs of operating the new Material Recovery Facilities (MRFs), composting plants and storage facilities is up to $250 million. Revenues from tipping fees, however, presently are $150 per tonne, which will generate annual revenues of only $200 million a year.

At present rates of waste landfilling, a short fall in revenues of some $50 per year would be experienced, necessitating additional revenue from some source. It is suggested above that draws from the waste reduction fund will assist, but that cannot provide a permanent solution.

The problem is exacerbated by other factors:

- as more and more material is diverted from landfill, through the success of 3Rs programs, disposal revenues will fall; under the scenario presented by the Task Force, in order to divert over 50%, the amount initially diverted from landfill will be close to 70% because the processing of recyclables will only be at an 80% efficiency rate, with the remaining 20% of residue then going back to landfill disposal - since there will be no revenue arising from that residue which is generated by Metro facilities the disposal revenue is reduced initially by 70%

- both Metro and the province will continually be tempted to divert disposal revenues to other pressing and worthwhile ends; as disposal revenues shrink, there is a danger they will also be diverted to other purposes

- simply increasing tipping fees to make up the short fall carries problems; raising tipping fees to $300 or $400 a tonne will generate considerable resistance, provide incentives for illegal dumping and severely penalize those who have already reduced their wastes to the minimum

The question of who will pay for the recycling and composting infrastructure recommended here is, for these reasons, of prime importance.

Options

There seem to be three basic options:

- Metro encourages the private sector to provide the infrastructure and pay the cost

- Metro builds the infrastructure and then meets the cost through a provincially imposed charge-back on all waste generators

- Metro builds the infrastructure and then meets the cost, at least in part, through revenues from sale of ICI sector recyclables; to do so, Metro would take over ICI collection from the private sector

Discussion of each follows:

1) In this scenario, Metro would allow the private sector to build, own and operate the diversion facilities, and thereby incur none of the costs. Metro and the area municipalities would only only pay for the mixed waste collection and disposal infrastructure.

Benefits: Metro avoids the capital and operating costs outlined in this report.

Problems: in all likelihood, diversion rates would never approach 50% since the private sector, unless it was heavily subsidized, could only recycle those materials for which there is net profit. It that subsidy was provided, Metro would still be paying the price, but without effective control of waste management. The public would suffer from this lack of control, since private sector waste management firms are less accountable than the elected government of Metro Toronto.

A further problem is that incentives for reduction would not be present when private sector profits depended on a steady flow of recyclable materials. Companies are unlikely to want to reduce their profits by reducing the flow of recycled materials into their plants. Proposals for expansion of deposit return systems for bottles and other waste reduction and re-use measures would very possibly be opposed by the waste recycling industry.

2) Metro builds the infrastructure and attempts to fund it through a charge back system, initiated by the province. Under this type of regime, the manufacturers of products would be responsible for the disposal or recycling costs of their products. Individual waste generators might also be charged on a user pay system, provided a means was found to eliminate the social inequities inherent in such an approach.

Benefits: the cost of operating the waste reduction, re-use and recycling system is shared between users and waste generators, thereby carrying cost directly back to the generator and the disposer. A clear and direct incentive for reduction is provided.

Problems: such an approach is inherently complex and would require extensive planning and consultation before it could be developed in a way which would both meet the waste reduction objectives and provide some degree of equity, fairness and cost-efficiency.

3) Metro takes over collection, processing and sale of ICI recyclables, using revenues to defray costs of the infrastructure.

Benefits: Metro would be marketing materials which can be collected at less expense than residential materials; municipal collection costs are around $65 a tonne, while experience in Etobicoke suggests that ICI collection costs can be as low as $7.00.
Metro would have the benefit of complete flow control, which would assist in marketing and pricing of recyclables.

Metro would experience job creation benefits. Recyclable processing facilities located within Metro will provide local employment benefits. The Institute for Local Self Reliance in Washington, D.C. estimates that for a city of one million, 1,400 jobs can be created by large-scale recycling and annual gross revenue will be in the region of $270 million. The City of Muskogee, Oklahoma has made a concentrated effort to collect and locally process recyclable, with significant job creation benefits and annual revenues of $40 million.

Problems: such an approach will be opposed by the waste management industry and will therefore require extensive discussion and consultation before it can it can be implemented.

Conclusions

Leaving recycling completely in the hands of the private sector is unlikely to lead to large scale diversion programs. A shared public-private system, with public costs funded through disposal fees and generator charges, provides the benefit of reduction incentives but is inherently difficult to develop. A completely public system will inevitably engender considerable opposition.

The issue is vital and requires further consideration by Metro Toronto.

Recommendation:

29. That Metro and the province explicitly and publicly address and make decisions on the issue of private and public roles in waste recycling and adopt an explicit policy; that Metro Council create a study group, with representatives from citizen groups, labour, industry and the environmental community, to provide by December 31, 1991 suggestions on public and private roles; and that the study group also consider legal issues related to community-based siting.

Part D. Action Plan

12. Time-table

What follows is a time-table for implementation of the Task Force recommendations during the period from presentation of the report to Metro Works Committee on June 12, 1991 through to 1993, when the 50% diversion program can be implemented.

June and July	Metro Works Committee considers report; presumably refers to Commissioner for report and other parties for deputations
	Commissioner reports; deputations heard by Works Committee; Works Committee makes recommendations
	Council considers and adopts, with or without amendments, Committee recommendations
August	provincial government begins consideration of requested amendment to the Metro Act
	Metro Legal Department begins development of Waste Reduction By-law
	Metro establishes Waste Reduction Office
	Metro begins planning, with local communities, for design and siting of recycling facilities

Dec. 31	by this date amendment to the Metro Act has been enacted by the Ontario Legislature
Jan. - March 1992	Metro enacts Waste Reduction By-law, effective Jan. 1, 1993
	Metro has completed plans for recycling facilities, based on community process and submitted applications to MOE for approval
	Metro begins program of informing generators of mandatory source separation requirements which will be effective Jan. 1, 1993
April 1, 1992	MOE has completed processing applications; if requested, hearings ready to commence
July - Dec.,1992	hearings, where required, for facilities;
Dec. 31, 1992	recycling facilities for which no hearings in place
	Waste Reduction Office administration fully in place
Jan. 1, 1993	Waste Reduction by-law comes into effect; all generators separate 50% diversion program begins based on collection, sorting, composting, storage and marketing

Appendix 1.

Composition and Mandate of the Metro Waste Reduction Task Force

On March 7, 1990, the Metro Works Committee considered a submission from the It's Not Garbage Coalition which recommended that Metro Council adopt the five principles of: (1) mandatory source separation by all generators; (2) storage for used materials; (3) allocation of sufficient financial and human resources to waste reduction; (4) creation of a waste reduction office with a sole mandate for reduction activities; (5) assistance and co-operation of community groups in establishing waste sorting, recycling, storage and compost facilities.

The Coalition defined itself in that submission as "an informal, but broadly based, coalition of community, labour, business and environmental groups ... supported by C.U.P.E. and the O.W.M.A., i.e, the public and private sector organizations that manage Metropolitan Toronto' wastes."

Members of the Coalition were listed as:

Pollution Probe
Greenpeace
Canadian Environmental Law Association
Sierra Club
Environmental Action Ontario
Save the Rouge
Pickering and Ajax Citizens Together
Vaughan Cares
Parkdale Environmental Action
York U Can Recycle
Toronto Environmental Alliance
Citizens for a Safe Environment

The submission stated that "the aforementioned agenda is also endorsed by:

The Ontario Waste Management Association
The Ontario Federation of Labour
Women Plan Toronto
Lansing Community Association"

By report dated March 28, 1990, the Commissioner of Works stated that the Coalition proposals were "in essential agreement with both the Waste Reduction and Recycling Plan being implemented by the Works Department, and with the recommendations for further waste reduction and recycling efforts contained within the Discussion Documents under consideration with the S.W.E.A.P. process." The Commissioner recommended that "Metropolitan Council strike a Special Waste Reduction Task Force to prepare detailed plans" for implementation of the five principles.

This recommendation was approved by the Works Committee and the Committee recommendation was approved in principle by Metro Council at its meeting held on April 25, 26, 27 and May 1, 1990.

During subsequent discussion between the Commissioner and the Coalition it was decided that CELA would co-ordinate work of the Task Force.

At the meeting of July 4, 1990, Council adopted the following recommendation contained in Report 11, Clause 14 of the Works Committee:

"The Works Committee recommends to Council the expenditure of up to $75,000 to be allocated from the Solid Waste Environmental Assessment Plan Capital Account for Recycling Studies, in accordance with the following report (June 18, 1990) from the Commissioner of Works, to engage the Canadian Environmental Law Association to undertake a Waste Reduction Study; and further that staff support for this project be allocated by the Commissioner of Works from his existing sources:"

Membership of the Task Force, set out in the June 18, 1990, report of the Commissioner, was as follows:

Kathy Killinger, Recycling Co-ordinator, East York
Paul Lisanti, OWMA
Aine Sutle, CSE
Lloyd Thomas - Dorothy Pocock, community group outside Metro
Barbara Wallace, Citizens' Clearing House on Waste Management
Peter Leiss - John Calvert, C.U.P.E.
Steven Shrybman - Gerard Coffey, Its Not Garbage
Two members to be named by the Works Department
Councillor Paul Christie
Councillor Joan King

The Task Force was established during July and August, 1990, during which time the following membership changes were made:

Ms. Gwen Discepolo, Halton's Recycled Resources Ltd., was appointed, representing both the Recycling Council of Ontario and the OWMA

Mr. Drew Blackwell and Mr. Joseph Hall were appointed as the Metro Works Department representatives

Mr. Steven Shrybman was appointed chair.

In early 1991 Drew Blackwell and Steven Shrybman were appointed to, respectively, the Ministry of Environment and Cabinet Office and for that reason left the Task Force. Mr. Doug Macdonald was hired to act as co-ordinator and writer of the Task Force report. Mr. Peter Pickfield was subsequently hired to assist in drafting the report.

Bill Crowther, Gwen Discepolo, Joseph Hall, Kathy Killinger, Joan King, Paul Lisanti and Paul Christie acted in an advisory capacity only and are not signatories to the Task Force report.

This report is presented to Metro Council by the following Task Force membership:

Gerard Coffey
Peter Leiss
Aine Suttle
Lloyd Thomas
Barbara Wallace

Lawson Oates of the Metro Works Department acted as secretary to the Task Force.

Co-ordination and drafting of the report were done by Doug Macdonald with the assistance of Peter Pickfield. Financial administration was done by Sarah Miller of the Canadian Environmental Law Association.

Appendix 2.

Proposals to amend the Metro Act

. report from the Solicitor to the Metro Works Committee, Nov. 27, 1990

. report from the Works Commissioner to the Metro Works Committee, May 28, 1991

01/10/91 SWEAP

The Municipality of
Metropolitan Toronto

Metropolitan Legal Department

November 27, 1990

To: Metropolitan Works Committee

From: Metropolitan Solicitor

Subject: Revised section 66 of the Municipality of Metropolitan Toronto Act

Recommendation:

That the draft legislation appended to this report as Appendix "A" be received for information and circulated for comments from the area municipalities and any persons as deemed appropriate by the Commissioner of Works, and that a further report by the Commissioner of Works and the Metropolitan Solicitor be brought back to the Works Committee at its first meeting in 1991.

Background:

As set out in my previous report dated October 2, 1990, in examining the contents of a proposed comprehensive solid waste management by-law with the Works Department, it became apparent that much of the teeth of such a by-law would be dependant upon new legislation being enacted if the intent of such a by-law was to go beyond the mere consolidation of existing waste bans and to address such regulatory initiatives as a manifest system and waste audits.

Based on meetings with the Works Department, the draft legislation appended hereto as Appendix "A" contains the broad range of powers which the Works Department would recommend be assumed by Metro.

Comments:

The provincial announcement by the Minister of the Environment on November 21 would appear to provide that the waste disposal function of the Metropolitan Corporation will be soon lost to a new Provincial authority ("Authority"). The draft piece of legislation before you continues to deal with the disposal element of waste management. First of all, in the absence of any certainty as to the extent of any change to Metro's powers, which may be extensive, I have taken a simple approach of continuing to include the current powers of sections 66 and 67 as much as possible (for example, the ability to acquire land for disposal, which will probably disappear).

Secondly, there has not been sufficient time to clarify the specific mandate of the new Authority. While new Provincial legislation creating an Authority may be concurrent with amendments to the regional acts, including this Corporation's, to delete the power over disposal, there is a possibility that Metro may retain some disposal power given that the Authority may well contract back the operation of disposal sites to the regional municipalities, including this Corporation.

Rather than dealing simply in terms of the disposal of waste, the draft legislation explicitly confers the power and the duty to provide a waste management system for the Metropolitan area dealing with all aspects of waste and recyclable material including the following powers, if Metro wishes to adopt them:

- the collection of waste or recyclable material (66(5)(i));

- compelling persons generating waste within the Metropolitan area to make use of the system or any part thereof (s.66(5)(e);
- prohibiting all persons, including area municipalities, from establishing a waste management system, or any part thereof, without the Metropolitan Corporation's consent (s.66(9) and (11));
- designating for persons generating waste, including area municipalities, the facilities and services that they are to use within the waste management system (s.66(5)(f));
- mandatory source separation (s.66(5)(g));
- waste audits (s.66(5)(h));
- a permit system for persons transporting and delivering waste to any Metropolitan Corporation facility or lands with a provision for exemption for any class of persons. The intent of the permit system is to provide a regulatory means of ensuring compliance with waste bans (s.67);
- provision of bonuses in addition to grants (s.66(5)(k));
- a user pay system (s.66(14));
- explicit provision of a manifest system (s.66(5)(l));
- allows for amendment of existing agreements entered into as a result of any prior approval to facilities. (This had already been requested of the Province by the Metropolitan Corporation.) (s.66(6)(c));

Given the extensive nature of the draft amendments contained in Appendix "A", there should be a period of consultation with affected parties before adoption of any such amendments by this Corporation. In particular, SWEAP'S Discussion Paper No. 13, "A Regulatory Agenda for Solid Waste Reduction", states that in the absence of any empirical experience with mandatory waste auditing, that it is probably wise to proceed with some caution, and recommends the approach adopted in the State of Rhode Island which provided considerable prior notice of the impending regulatory requirement of waste audits.

H.W.O. Doyle
Metropolitan Solicitor

JEA:dl
Attach.

APPENDIX "A"

Draft Revised Section 66 of The Municipality of Metropolitan Toronto Act
(incorporating the existing section 67 of the Act)

66 (1) In this part,

(a) "area municipality" includes a local board;

(b) "person" includes any partnership, association, corporation, municipality as defined in the Municipal Affairs Act, a regional or district municipality and the County of Oxford or a local board of a regional or district municipality, Her Majesty in Right of Canada, Her Majesty in Right of any Province, or any agency of either of them;

(c) "recyclable material" means those materials which are designated as capable of being recycled by by-law of the Metropolitan Council;

(d) "recycling" means any process by which waste or materials which would otherwise become waste are collected, separated or processed and returned to the economic mainstream in the form of raw materials or products, but does not include composting;

(e) "waste" means ashes, garbage, refuse, domestic waste, commercial waste, industrial solid waste or municipal refuse and such other wastes or classes thereof as may be designated by by-law of the Metropolitan Council;

(f) "waste management system" means facilities, equipment, operations and programs in respect of the management of waste and recyclable material including, without limiting the generality of the foregoing, the handling, transporting, receiving, storage, transfer, recycling, composting, dumping and disposal of waste, but does not include the collection of waste and recyclable material and the transportation of such waste and recyclable material by an area municipality, except as otherwise assumed by the Metropolitan Corporation pursuant to clause 66(5)(i).

(2) The Metropolitan Corporation shall provide and maintain a waste management system for the Metropolitan Area.

(3) The Metropolitan Corporation may establish and operate programs in respect of the reduction and re-use of waste.

(4) The Metropolitan Corporation may establish and provide, as part of a waste management system, facilities, equipment, operations and programs in respect of the recovery, manufacture, production, supply, sale or distribution from domestic, commercial, or industrial sewage or waste of any product, resource, commodity, electrical power or energy, hot water or steam.

(5) For the purposes of subsections (2), (3) and (4) the Metropolitan Corporation may,

(a) acquire and use land in any local municipality or in territory without municipal organization;

(b) erect, maintain and operate buildings, structures, machinery or equipment;

(c) designate any material as waste or as recyclable material and, for this purpose, establish such criteria as the Metropolitan Council considers appropriate for the classification of waste and recyclable material, which criteria may relate to the type of waste and material, its source, the manner in which it has been collected or brought to any place, and any other criteria which the Metropolitan Council deems appropriate;

(d) prohibit or regulate the receiving, dumping or disposing of waste or recyclable material or any class or classes thereof upon the lands or within the facilities of the Metropolitan Corporation;

(e) compel persons generating waste or persons transporting waste generated within the Metropolitan Area to make use of the waste management system or any part thereof;

(f) designate, for persons generating waste or persons transporting waste generated within the Metropolitan Area and for each area municipality, one or more facilities, services or lands for the storage, processing or transfer of recyclable material and for the disposal, treatment, storage, processing, transfer, reduction, reuse, recovery or recycling of waste or any class or classes thereof;

(g) establish waste management guidelines for the separation at the source of collection of recyclable material from waste generated from any class of premises and, where an area municipality has not so provided by by-law in accordance with such guidelines, require persons generating waste within the Metropolitan Area to separate recyclable material or any class or classes thereof from waste at the source of collection, specify the manner in which recyclable material is to be placed for collection and transported and exempt persons occupying commercial, industrial and institutional premises within the Metropolitan Area from any or all of such requirements for the separation of recyclable material at the source of collection if those persons have otherwise provided for the recycling of recyclable material;

(h) require persons owning, operating or managing commercial, industrial or institutional premises, or multi-unit residential housing, or any class or classes thereof or any person generating waste from such premises or housing or any class or classes thereof, to file with the Metropolitan Corporation and comply with a waste reduction and recycling plan in accordance with waste management guidelines established by by-law of the Metropolitan Corporation, which guidelines may require the disclosure of the method of generation of waste, the type and quantity thereof, the possibility of recycling waste materials not designated as recyclable material, the timing of improvements to waste management practices, the approval of the Metropolitan Corporation to the plan and periodic reporting after filing;

(i) assume from any area municipality the power of providing services or facilities for the collection of any waste or recyclable material or any class or classes thereof and transport such waste or recyclable material or such class or classes thereof;

(j) establish rates or charges for the use of the waste management system which rates or charges may vary in respect of different classes, volumes or weights of waste or recyclable material or may vary having regard to such other criteria in respect of waste or recyclable material or the use of property which is part of the waste management system as the Metropolitan Council considers appropriate;

(k) provide grants, including bonuses, to any person, on such terms as it considers expedient, for the study of, establishment or operation of facilities, equipment, or programs for the separation of waste at the source of collection or involving the recycling, reduction, re-use or recovery of waste or any class or classes thereof;

(l) inspect any container or load of waste brought to the lands and facilities of the Metropolitan Corporation and require the disclosure of the nature, composition and source of the waste as a condition of its receipt at or upon the lands or within the facilities of the Metropolitan Corporation and may prescribe documentation to be provided by any person as a condition to its receipt;

(m) provide standards and regulations for vehicles or any class or classes thereof used for the haulage of waste or recyclable material to any lands or facilities of the Metropolitan Corporation, whether located in the Metropolitan Area or otherwise;

(n) carry on investigations, experiments, research or development;

(o) construct and maintain pipes, apparatus and equipment on, over, under or across any highway or any other land;

(p) acquire any patents or licence or any interest in any patent or licence or dispose of any patent or licence by sale or otherwise; and

(q) enter into agreements with any person, including any area municipality, which agreements may, without limiting the generality of the forgoing, provide for the joint ownership, management and operation of the facilities, equipment, operations and programs upon such terms, including the payment of compensation, as may be agreed upon.

(6) (a) No land shall be acquired in a local municipality under subsection (5) without the approval of the local municipality, which approval may be granted upon such terms and conditions as may be agreed upon, or failing such approval or agreement, the approval of the Municipal Board, and no land shall be acquired in territory without municipal organization under subsection (5) without the approval of the Municipal Board.

(b) "Land" in this subsection does not include an option, conditional agreement of purchase of sale or other contingent interest.

(c) Any approval granted or agreement entered into by or with a local municipality under clause (6)(a) may be amended as to its terms or conditions by the agreement of the local municipality and any approval granted by the Municipal Board in respect of land acquired in territory without municipal organization may be amended by the Municipal Board.

(7) The Municipal Board, before giving its approval, or amending same, under subsection (6), shall hold a public hearing and shall give or cause to be given at least ten days notice of the hearing to the clerk of the municipality concerned and to such other persons in such manner as the

Municipal Board may direct, and the Municipal Board, as a condition of giving any such approval, may by its order impose such terms and conditions respecting the acquisition or use of such land as to the Municipal Board may appear necessary or expedient, and the Municipal Board may order the amendment of any official plan or of any by-law passed under section 39 of the Planning Act to permit the use of the land for the purposes for which it is to be acquired.

(8) The Municipal Board, upon the application of the Metropolitan Corporation for the acquisition or use of land under subsection (6) may amend any terms or conditions upon which any prior approval has been granted or by which prior agreement has been reached with a local municipality or regional municipality and the provisions of subsection (7) shall apply mutatis mutandis.

(9) No area municipality shall establish a waste management system, or part thereof, in the Metropolitan Area, or, where a designation has been made pursuant to clause 66(5)(f), utilize facilities, services or lands of the Metropolitan Corporation except the facilities, services or lands that have been designated for that area municipality, or provide any service or facility in the collection of waste or recyclable material the power of which has been assumed by the Metropolitan Corporation pursuant to clause 66(5)(i), without the consent of the Metropolitan Council, which consent may be given upon such terms, including the payment of compensation, as may be agreed upon;

(10) No by-law of any municipality heretofore or hereafter passed under paragraph 129 of section 210 of the Municipal Act or a predecessor thereof shall apply to the operations of the Metropolitan Corporation under subsections (2), (3), or (4).

(11) (a) No person shall establish a waste management system, or part thereof, in the Metropolitan Area without the consent of the Metropolitan Council.

(b) If under a by-law passed under clause 66(5)(f) the Metropolitan Corporation has designated for a person generating waste within the Metropolitan Area one or more services, facilities or lands for the disposal, treatment, storage, processing, transfer, reduction, reuse, recovery or recycling of waste or any class or classes thereof, that person shall not use any services, facilities or lands that have not been so designated for that person.

(12) The Metropolitan Council may pass by-laws for providing that any person who contravenes a by-law passed by the Metropolitan Council pursuant to this section or who misrepresents any information required to be disclosed by a by-law of the Metropolitan Corporation or who contravenes subsection 66(11) is guilty of an offence and for providing for the imposition of fines of not more than $50,000.00 on every person who is convicted for a first offence and $100,000.00 for any subsequent offence under any such by-law and the by-law may provide that every director or officer of a corporation who knowingly concurs in such contravention, is guilty of an offence and on conviction is liable to a fine of not more than $50,000.00 or to imprisonment for a term of not more than one year or to both.

(13) Any by-law passed under subsection (12) may provide that any person who dumps or disposes of waste or recyclable material or any class thereof upon the lands or within the facilities of the Metropolitan Corporation contrary to the provisions of any by-law passed by the Metropolitan Council shall reimburse the Metropolitan Corporation for any costs or expenses in providing for the proper disposition or removal of such waste or recyclable material.

(14) (a) The Metropolitan Council may by by-law provide for imposing on and collecting from an area municipality a waste management rate sufficient to pay the whole or such portion of the Metropolitan Corporation's costs, including debenture charges and expenditures, as the by-law may specify of the establishment, maintenance and operation of the waste management system and such rate may be based on the volume or weight of waste or of a class of waste received from the area municipality or on any other basis that the by-law may specify.

(b) All rates or levies imposed under paragraph (14)(a) on an area municipality constitute a debt of the area municipality to the Metropolitan Corporation and shall be payable in such times and in such amounts as may be set out in the by-law.

(c) An area municipality,

(i) may pay the whole or part of the amount charged to it under this section out of its general funds; and

(ii) may pass by-laws under paragraphs 85 and 86 of section 210 of the Municipal Act for imposing rates to recover the whole or part of the amount charged to it.

67 (1) No person shall transport and deliver waste or recyclable material to any facility or lands of the Metropolitan Corporation from any multi-unit residential housing or any institutional, commercial or industrial premises or any classes thereof designated by by-law without first having obtained a permit therefor from the Metropolitan Corporation, provided however that;

(a) individuals transporting and delivering waste in the course of their employment by a person holding a permit from the Metropolitan Corporation shall not be required to obtain a permit therefor; and

(b) the Metropolitan Corporation may by by-law exempt any persons, waste or recyclable material or any class or classes of persons, waste or recyclable material from the requirements of this subsection.

(2) All vehicles used in the transportation and delivery of waste or recyclable material to a facility or lands of the Metropolitan Corporation from any multi-unit residential housing or institutional, commercial or industrial premises, or any classes designated by by-law shall be owned or leased by a person holding a valid permit issued pursuant to subsection (1) herein, or be exempt from the permit requirement pursuant to subclauses (1)(a) or (1)(b).

(3) Each applicant for a permit and each permit holder shall provide to the Metropolitan Corporation and maintain either an irrevocable letter of credit or a bond under which the permit holder shall be jointly and severally bound with a corporate surety satisfactory to the Metropolitan Treasurer for the following:

(a) amounts due to the Metropolitan Corporation for rates or charges established under clause 66(5)(j); and

(b) damages or costs resulting from the permit holder's failure to comply with this section, or any by-law passed pursuant to this section.

and the irrevocable letter of credit or bond required pursuant to this subsection shall be in a form and an amount fixed from time to time by the Metropolitan Council.

(4) For the purposes of this subsection, the Metropolitan Corporation may pass by-laws for regulating and providing for on such terms and conditions as the Metropolitan Council considers expedient:

(a) the issuance, review, suspension and revocation of permits;

(b) the registration of vehicles;

(c) the requiring of insurance, and the required insurance coverage; and

(d) any other matter in relation to the transportation and delivery of waste or recyclable material by permit holders to facilities and lands of the Metropolitan Corporation.

[illegible]

29.

METROPOLITAN WORKS DEPARTMENT

May 28, 1991

To: Metropolitan Works Committee

From: Commissioner of Works

Subject: Revised Section 66 of the Municipality of Metropolitan Toronto Act

Recommendation:

That the draft legislation appended to this report as Appendix "A" be endorsed and forwarded to the Minister of Municipal Affairs with a request for its passage.

Background:

On December 19, 1990, by Adoption of Clause No. 10 of Report 20 of the Works Committee Metropolitan Council received a proposed revised a revised Section 66 of the Metropolitan Toronto Act and approved circulation of the draft for comments from the Area Municipalities and any persons deemed appropriate by the Commissioner of Works.

The attached revised draft Section 66 of the Municipality of Metropolitan Toronto Act incorporates proposed changes arising after further discussion with staff of the Legal Department, Ontario Waste Management Association, Multistakeholders Committee and the area municipalities. The following highlight the changes since the previous draft, although it should be emphasized that the changes do not reflect any particular comments and are in part of a housekeeping nature:

(a) By new clause 66(5)(g) the Metropolitan Corporation would have the ability to establish waste management guidelines pertaining to the frequency and manner of collection of waste or recyclable materials by area municipalities without assuming the power of collection.

(b) While flow control has been maintained by clauses 66(5)(e) and (f), a provision has been included to provide that flow control will not apply in respect of waste going to facilities which have received Metropolitan Council's approval under clause 66(12)(a).

(c) You will also note the provisions of 66(12)(a) which gives a right of consent by Metropolitan Council to the establishment of a waste management facility or system. That consent is now made explicit on terms and conditions including a restriction on the importation of waste or recyclable materials or on the class of waste or recyclable material to be managed by the facility.

Other matters which should be noted are changes relating to the following:

(a) Explicit definitions of "reduction" and "re-use".

(b) An amplification to the definition of "waste" to make it clear that anything can be designated as waste by by-law of the Metropolitan Corporation irrespective of any potential arguments on the commercial value or re-use capabilities of the materials which are being generated. As well clarity has been given to the definition so that it includes recyclable materials if not source separated.

(c) To clause 66(5)(i) to make explicit that a waste reduction and recycling plan can address the issue of the re-use of materials, in addition to their recycling.

(d) A new clause 66(5)(j) which amplifies the ability of the Metropolitan Corporation to establish a by-law which compels adherence to the waste reduction and recycling plan once filed.

(e) The inclusion of a new subsection 66(6) which makes it clear that all waste deposited at a facility of the Metropolitan Corporation becomes the property of the Metropolitan Corporation for any use whatsoever.

With respect to Municipal collection we require the power to establish waste management guidelines in respect to that function and, ultimately, to assume authority for collection of waste from residents. This authority is required to continue our current Toxics Taxi hazardous waste collection program as well as to enable us to assume collection of blue box recyclables, which we are currently funding, should that be required in future to deliver the program in the most cost effective, efficient manner to the residents of Metropolitan Toronto.

There have not been many comments made about the draft other than the protests of the area municipalities and the comments of the MSC sub-committee which were adopted by MSC. It would appear that the Waste Reduction Task Force is in favour of the draft legislation.

With respect to the comments received from the area municipalities, the request by the City of Toronto that Metropolitan Toronto "initiate a forum of discussion of waste management" will only result in undue delay. If such a forum is considered necessary it could be implemented by the Province when considering the request for legislation by Metropolitan Toronto.

Many of the MSC sub-committee comments more appropriately relate to the process and content of any comprehensive waste management by-law that may be passed under any new legislation (for example, the type of waste or basis of exemption that MSC states are vague).

With respect to disposal, we have taken the simple approach, in the absence of any certainty regarding the powers of the new GTA public Authority, of continuing to include the current disposal powers of Sections 66 and 67.

R.G. Ferguson
Commissioner of Works

WGC:kl section.66

APPENDIX A

MAY 28TH, 1991

Draft Revised Section 68 of The Municipality of Metropolitan Toronto Act
(incorporating the existing section 67 of the Act)

68 (1) In this part,

(a) "area municipality" includes a local board;

(b) "person" includes any partnership, association, corporation, municipality as defined in the Municipal Affairs Act, a regional or district municipality and the County of Oxford or a local board of a regional or district municipality, Her Majesty in Right of Canada, Her Majesty in Right of any Province, or any agency of either of them;

(c) "recyclable material" means those materials which are designated as capable of being recycled by by-law of the Metropolitan Council;

(d) "recycling" means any process by which waste or materials which would otherwise become waste are collected, separated or processed and returned to the economic mainstream in the form of raw materials or products, but does not include composting;

(e) "reduction" means any measure that reduces the generation of waste and that minimizes the quantities of post consumer materials that must then be processed for re-use, recycling or disposal;

(f) "re-use" means the return of waste, or material which would otherwise become waste, to productive use without treatment and without changing its form or use;

(g) "waste" means ashes, garbage, refuse, domestic waste, commercial waste, industrial solid waste or municipal refuse and such other substances as may be designated by by-law of the Metropolitan Council, whether or not the types of waste referred to above or substances designated by by-law have commercial value or are capable of being utilized and includes recyclable material if not separated from waste at the point of collection;

(h) "waste management system" means facilities, equipment, operations and programs in respect of the management of waste and recyclable material including, without limiting the generality of the foregoing, the handling, transporting, receiving, storage, transfer, recycling, composting, dumping and disposal of waste, but does not include the collection of waste and the recyclable material and the transportation of such waste and recyclable material by an area municipality, except as otherwise assumed by the Metropolitan Corporation pursuant to clause 68(5)(c).

(2) The Metropolitan Corporation shall provide and maintain a waste management system for the Metropolitan Area.

(3) The Metropolitan Corporation may establish and operate programs in respect of the reduction and re-use of waste.

(4) The Metropolitan Corporation may establish and provide, as part of a waste management system, facilities, equipment, operations and programs in respect of the recovery, manufacture, production, supply, sale or distribution from domestic, commercial, or industrial sewage or waste of any product, resource, commodity, electrical power or energy, hot water or steam.

(5) For the purposes of subsections (2), (3) and (4) the Metropolitan Corporation may,

(a) acquire and use land in any local municipality or in territory without municipal organization;

(b) erect, maintain and operate buildings, structures, machinery or equipment;

(c) designate any material as waste or as recyclable material and, for this purpose, establish such criteria as the Metropolitan Council considers appropriate for the classification of waste and recyclable material, which criteria may relate to the type of waste and material, its source, the manner in which it has been collected or brought to any place, and any other criteria which the Metropolitan Council deems appropriate;

(d) prohibit or regulate the receiving, dumping or disposing of waste or recyclable material or any class or classes thereof upon the lands or within the facilities of the Metropolitan Corporation;

(e) compel persons generating waste or persons transporting waste generated within the Metropolitan Area to make use of the waste management system or any part thereof;

(f) designate, for persons generating waste or persons transporting waste generated within the Metropolitan Area and for each area municipality, one or more facilities, operations, programs or lands for the storage, processing or transfer of recyclable material and for the disposal, treatment, storage, processing, transfer, reduction, reuse, recovery or recycling of waste or any class or classes thereof;

(g) establish waste management guidelines pertaining to the frequency and manner of collection of waste and recyclable materials by area municipalities;

(h) establish waste management guidelines for the separation at the point of collection of recyclable material from waste generated from any class of premises and, where an area municipality has not so provided by by-law in accordance with such guidelines, require persons generating waste within the Metropolitan Area to separate recyclable material or any class or classes thereof from waste at the point of collection, specify the manner in which recyclable material is to be placed for collection and transported and exempt persons occupying commercial, industrial and institutional premises within the Metropolitan Area from any or all of such requirements for the separation of recyclable material from waste at the point of collection if those persons have otherwise provided for the recycling or re-use of the waste;

(i) require persons owning, operating or managing commercial, industrial or institutional premises, or multi-unit residential housing, or any class or classes thereof or any person generating waste from such premises or housing or any class or classes thereof, to file with the Metropolitan Corporation a waste reduction and recycling or re-using plan in accordance with waste management guidelines established by by-law of the Metropolitan Corporation, which guidelines may require the disclosure of the method of generation of waste, the type and quantity thereof, the possibility of recycling or re-using waste material not designated as recyclable material, the timing of improvements to waste management practices, the approval of the Metropolitan Corporation to the plan and the waste materials capable of being recycled or re-used and periodic reporting after filing;

(j) upon approval by the Metropolitan Corporation of the waste reduction and recycling plan referred to in clause 66(5)(i), require persons to comply with the provisions of the plan, as modified by any periodic reporting after initial filing, in respect of the timing of improvements to waste management practices and the recycling or re-use of waste materials identified by the plan.

(k) assume from any area municipality the power of providing services or facilities for the collection of any waste or recyclable material or any class or classes thereof and transport such waste or recyclable material or such class or classes thereof;

(l) establish rates or charges for the use of the waste management system which rates or charges may vary in respect of different classes, volumes or weights of waste or recyclable material or may vary having regard to such other criteria in respect of waste or recyclable material or the use of property which is part of the waste management system as the Metropolitan Council considers appropriate ;

(m) provide grants, including bonuses, to any person, on such terms as it considers expedient, for the study of, establishment or operation of facilities, equipment, or programs for the separation of waste at the source of collection or involving the reduction, re-use, recycling or recovery of waste or any class or classes thereof;

(n) inspect any container or load of waste or recyclable material brought to the lands and facilities of the Metropolitan Corporation and require the disclosure of the nature, composition and source of the waste or recyclable material as a condition of its receipt at or upon the lands or within the facilities of the Metropolitan Corporation and prescribe documentation to be provided by any person as a condition to its receipt;

(o) provide standards and regulations for vehicles or any class or classes thereof used for the haulage of waste or recyclable material to any lands or facilities of the Metropolitan Corporation, whether located in the Metropolitan Area or otherwise;

(p) carry on investigations, experiments, research or development;

(q) construct and maintain pipes, apparatus and equipment on, over, under or across any highway or any other land;

(f) acquire any patents or licence or any interest in any patent or licence or dispose of any patent or licence by sale or otherwise; and

(g) enter into agreements with any person, including any area municipality, which agreements may, without limiting the generality of the forgoing, provide for the joint ownership, management and operation of the facilities, equipment, operations and programs upon such terms, including the payment of compensation, as may be agreed upon.

(6) All waste or recyclable material deposited at or on any of the facilities or lands of the Metropolitan Corporation shall become the property of the Metropolitan Corporation and may be salvaged, recycled, reclaimed, re-used, disposed of or otherwise dealt with as the Metropolitan Corporation may deem fit, subject, however, to the terms and conditions of any agreement entered into by the Metropolitan Corporation or the certificate of approval issued under the provisions of the Environmental Protection Act for any such facility or lands.

(7) (a) No land shall be acquired in a local municipality under subsection (5) without the approval of the local municipality, which approval may be granted upon such terms and conditions as may be agreed upon, or failing such approval or agreement, the approval of the Municipal Board, and no land shall be acquired in territory without municipal organization under subsection (5) without the approval of the Municipal Board.

(b) "Land" in this subsection does not include an option, conditional agreement of purchase and sale or other contingent interest.

(c) Any approval granted or agreement entered into by or with a local municipality under clause (7)(a) may be amended as to its terms or conditions by the agreement of the local municipality and any approval granted by the Municipal Board in respect of land acquired in territory without municipal organization may be amended by the Municipal Board.

(8) The Municipal Board, before giving its approval, or amending same, under subsection (7), shall hold a public hearing and shall give or cause to be given at least ten days notice of the hearing to the clerk of the municipality concerned and to such other persons in such manner as the Municipal Board may direct, and the Municipal Board, as a condition of giving any such approval, may by its order impose such terms and conditions respecting the acquisition or use of such land as to the Municipal Board may appear necessary or expedient, and the Municipal Board may order the amendment of any official plan or of any by-law passed under section 39 of the Planning Act to permit the use of the land for the purposes for which it is to be acquired.

(9) The Municipal Board, upon the application of the Metropolitan Corporation for the acquisition or use of land under subsection (7) may amend any terms or conditions upon which any prior approval has been granted or by which prior agreement has been reached with a local municipality or regional municipality and the provisions of subsection (8) shall apply mutatis mutandis.

(10) No area municipality shall establish a waste management system, or part thereof, in the Metropolitan Area, or, where a designation has been made pursuant to clause 66(5)(f), utilize facilities, operations, programs or lands of the Metropolitan Corporation except the facilities, operations, programs or lands that have been designated for that area municipality, or provide any service or facility in the collection of waste or recyclable material contrary to clause 66(5)(g) or in respect of which the power has been assumed by the Metropolitan Corporation pursuant to clause 66(5)(k), without the consent of the Metropolitan Council, which consent may be given upon such terms, including the payment of compensation, as may be agreed upon;

(11) No by-law of any municipality heretofore or hereafter passed under paragraph 129 of section 210 of the Municipal Act or a predecessor thereof shall apply to the operations of the Metropolitan Corporation under subsections (2), (3), or (4).

(12) (a) No person shall establish a waste management system, or part thereof, in the Metropolitan Area without the consent of the Metropolitan Council which consent may be given on terms and conditions, including, without limiting the generality of the foregoing, a restriction on the importation of waste or recyclable materials or any class or classes thereof from outside the Metropolitan Area or a prohibition on the class of waste or recyclable material to be managed by the facility or system.

(b) If under a by-law passed under clause 66(5)(f) the Metropolitan Corporation has designated for a person generating waste within the Metropolitan Area one or more, operations, programs, facilities or lands for the disposal, treatment, storage, processing, transfer, reduction, reuse, recovery, composting or recycling of waste or any class or classes thereof, that person shall not use any programs, services, facilities or lands that have not been so designated for that person.

(c) A by-law passed under clauses 66(5)(e) or 66(5)(f) shall not apply in respect of waste that is sent for recycling to a recycling facility in accordance with the terms and conditions of a consent given under clause 66(12)(a).

(13) The Metropolitan Council may pass by-laws for providing that any person who contravenes a by-law passed by the Metropolitan Council pursuant to this section or section 67 or who misrepresents any information required to be disclosed by a bylaw of the Metropolitan Corporation or who contravenes subsection 66(12) is guilty of an offence and for providing for the imposition of fines of not more than $50,000.00 on every person who is convicted for a first offence and $100,000.00 for any subsequent offence under any such by-law and the by-law may provide that every director or officer of a corporation who knowingly concurs in such contravention, is guilty of an offence and on conviction is liable to a fine of not more than $50,000.00 or to imprisonment for a term of not more than one year or to both.

(14) Any by-law passed under subsection (13) may provide that any person who dumps or disposes of waste or recyclable material or any class thereof upon the lands or within the facilities of the Metropolitan Corporation contrary to the provisions of any by-law passed by the Metropolitan Council shall reimburse the Metropolitan Corporation for any costs or expenses in providing for the proper disposition or removal of such waste or recyclable material.

(15) (a) The Metropolitan Council may by by-law provide for imposing on and collecting from an area municipality a waste management rate sufficient to pay the whole or such portion of the Metropolitan Corporation's costs, including debenture charges and expenditures, as the by-law may specify of the establishment, maintenance and operation of the waste management system and such rate may be based on the volume or weight of waste or of a class of waste received from the area municipality or on any other basis that the by-law may specify.

(b) All rates or levies imposed under paragraph (15)(a) on an area municipality constitute a debt of the area municipality to the Metropolitan Corporation and shall be payable in such times and in such amounts as may be set out in the by-law.

(c) An area municipality,

(i) may pay the whole or part of the amount charged to it under this section out of its general funds; and

(ii) may pass by-laws under paragraphs 85 and 86 of section 210 of the Municipal Act for imposing rates to recover the whole or part of the amount charged to it.

67 (1) No person shall transport and deliver waste or recyclable material to any facility or lands of the Metropolitan Corporation from any multi-unit residential housing or any institutional, commercial or industrial premises or any classes thereof designated by by-law without first having obtained a permit therefor from the Metropolitan Corporation, provided however that:

(a) individuals transporting and delivering waste in the course of their employment by a person holding a permit from the Metropolitan Corporation shall not be required to obtain a permit therefor; and

(b) the Metropolitan Corporation may by by-law exempt any persons, waste or recyclable material or any class or classes of persons, waste or recyclable material from the requirements of this subsection.

(2) All vehicles used in the transportation and delivery of waste or recyclable material to a facility or lands of the Metropolitan Corporation from any multi-unit residential housing or institutional, commercial or industrial premises, or any classes designated by by-law shall be owned or leased by a person holding a valid permit issued pursuant to subsection (1) herein, or be exempt from the permit requirement pursuant to subclauses (1)(a), or (1)(b).

(3) Each applicant for a permit and each permit holder shall provide to the Metropolitan Corporation and maintain either an irrevocable letter of credit or a bond under which the permit holder shall be jointly and severally bound with a corporate surety satisfactory to the Metropolitan Treasurer for the following:

(a) amounts due to the Metropolitan Corporation for rates or charges established under clause 52(5)(i); and

(b) damages or costs resulting from the permit holder's failure to comply with this section, or any by-law passed pursuant to this section or section 68.

and the irrevocable letter of credit or bond required pursuant to this subsection shall be in a form and an amount fixed from time to time by the Metropolitan Council.

(4) For the purposes of this subsection, the Metropolitan Corporation may pass by-laws for regulating and providing for on such terms and conditions as the Metropolitan Council considers expedient;

(a) the issuance, review, suspension and revocation of permits;

(b) the registration of vehicles;

(c) the requiring of insurance, and the required insurance coverage; and

(d) any other matter in relation to the transportation and delivery of waste or recyclable material by permit holders to facilities and lands of the Metropolitan Corporation.

Appendix 3.

South Riverdale Compost Facility Siting

. letter from CSE to Commissioner Ferguson, Sept. 28, 1990
. report from Commissioner to Metro Works Committee, Nov. 23, 1990

CITIZENS FOR A SAFE ENVIRONMENT
765 Queen St. E.
Toronto, Ontario
M4M 1H3
(416)462-3860

September 28, 1990

Mr. Robert Ferguson
Commissioner of Works
Phoenix House
Toronto, Ontario

Dear Mr. Ferguson,

I am writing on behalf of Citizens for a Safe Environment to inform you of our interest in participating with Metro in a community consultation process for the siting of a composting plant starting in the 100 tonne per day range. The goal of the process would be the determination of community support for the establishment of a composting plant in or near the communities in the Eastern Health Area.

This proposal is in response to your request for information on the proposal for a community based planning and siting process for a composting facility as set out in Councillor Dale Martin's letter of June 23, 1990.

We are interested in participating because we believe that the garbage crisis can only be solved in a way that respects the environment and host communities by involving communities in the decision making about garbage processing.

Therefore the plant should be built to allow for expansion once its viability has been proven. We hope that the plant would serve not only East Toronto but also other areas of the city.

Our participation is based on the agreement that the following conditions will be met.

CONDITIONS

1.Education Process

An education process for CSE and other interested parties is needed to familiarize us with composting technologies and the results of recent pilot projects. A workshop that utilized the knowledge of Metro staff as well as consultants would serve this purpose.

.../2

2.Pre-consultation Process

Before initiating a process of consulting the community CSE would require a grant to hire a consultant who would:

a)Determine if there were composting plants in operation that had solved the problems of odour and vermin.

b)Contact people living near those existing plants to determine their experience of the actual conditions.

c)Catalogue the existing technologies for composting and nuisance prevention.

We see this as a modest but necessary stage prior to public consultation. If no plant exists that has dealt with the problems successfully then we would have grave doubts about proceeding. The consultant to be hired would be precluded from working on the rest of the project so that we could avoid possible conflict of interest.

3.Public Consultation

If we have been able to determine that such plants can be operated successfully the next stage would be to undertake a public consultation process with the larger community. This would involve the provision of informational workshops for the public, direct consultation with community institutions (health centres, residents groups, co-ops etc.), and direct consultation meetings with the general public in the Eastern Health Area. We would expect that the public will ask for modifications to the process and proposal at this stage. These should be seriously considered for inclusion in the proposal.

Should the public reject the proposal at this stage then it would not proceed.

4.Independent Review

While CSE anticipates that the technical expertise for this project will be directed by a joint Metro/Community steering committee, proposals that come from Metro on a unilateral basis must be reviewed by an independent consultant working for the community.

5.Community Input on Design

The community has to be able to review the design of the facility to ensure incorporation of systems necessary to eliminate or minimize odour nuisance. As well we inconvenience the community. We expect that representatives of the union that will represent the workers at the plant will be part of this process.

6.Ongoing Community Participation

It is our expectation that at the outset the community working with Metro will be able to set operating parameters for the plant. Should the plant fail to meet those parameters the plant would have to be closed until the cause of the failure had been corrected. Should the plant repeatedly fail to operate as certified then there must be a mechanism in place to shut it down.

To that end we propose the creation of a community based liaison committee to ensure ongoing dialogue with the community and the facility's management. This committee would have access to plant operating records and would act to identify and address problems between the community and the plant.

7.Funding

In order to facilitate the community consultation process fu- will be required to hire short term employees who will be responsible for making the initial contacts in the community and who will facilitate the overall community consultation process. In the longer term we want Metro to consider the hiring of a permanent community consultation officer.

8.Community Benefits

Our area is one of high unemployment. In developing this facility serious attention must be paid to the hiring of local people. This will ease transportation problems and will give further incentive to the community to give the proposal serious consideration.

Summary

We feel that the conditions we have put forward are sensible and are key to finding community acceptance for the plant in an area so long effected by odour problems.

With Metro's support and agreement to these conditions a South Riverdale Compost Steering Committee (community, Metro and labour based) can be struck with the conditions cited above forming the basis of the Committee's Terms of Reference.

It is our understanding that the committee would operate on a consensus basis so that no decision would be made that was not acceptable to all parties.

We see our agreement as being with Metro and not as a contribution to the SWEAP process.

This 100 tonne per day plant could be the nucleus of a much larger facility. It is our concern that expansion only happen with a further community consultation process taking place. We would like to proceed quickly with this proposal so that the plant will be operative, if approved by the community, as soon as possible.

We look forward to your response.

Sincerely,

Peter Tabuns

Peter Tabuns
President

c.c. Drew Blackwell
c.c. Lawson Oates
c.c. CSE central files
c.c. Metro Labour Council, Linda Torney
c.c. It's Not Garbage

[illegible]

METROPOLITAN WORKS DEPARTMENT

November 23, 1990

To: Metropolitan Works Committee

From: Commissioner of Works

Subject: Discussions With Citizens for A Safe Environment to Facilitate Siting of Compost Facility

Recommendation:

That authorization be given to continue discussion with the Citizens For A Safe Environment for the purpose of siting a compost facility in South Riverdale.

Background:

On September 23, 1990, a proposal was received from Peter Tabuns, President of the Citizens For A Safe Environment (CSE). The CSE is centred in South Riverdale. The document proposes the formation of a joint steering committee between the Works Department and the CSE for the purpose of determining community support for the establishment of a 100 tonne per day composting plant in or near the communities in the Eastern Health Area (see attached) to serve an area greater than east Toronto. We are in support of this proposal and wish to initiate a joint steering committee based on a point by point response to the CSE's proposal.

The CSE's proposal was forthcoming following a meeting between the Executive of the CSE and a Works Department staff member. This meeting was arranged as a response to the June 18, 1990 letter from Councillor Dale Martin that proposed the establishment of a Solid Waste Management Committee in a number of communities, including South Riverdale. This letter was received by Works Committee, along with a submission from the Works Department (dated July 27, 1990) on August 1, 1990.

On November 3, 1990, our staff organized a workshop called Compost '90 at the Ontario Institute for Studies in Education. Our report, dated October 10, 1990, to Works Committee on this Workshop was received for information purposes on October 17, 1990. The goal of this workshop was to provide members of the CSE and other community/environmental organizations with information they had requested about composting technologies, size requirements, collection systems, marketing, etc. This workshop marked the end of Phase I of this project. Phase II is to form a joint steering committee to facilitate the siting of a compost facility.

The joint steering committee will be able to draw on the experience of Compost '90 and the diversity of expertise both within the Works Department and its consultants. As site specific studies and technology selection are developed, we will consider their request that a specialized consultant(s) to assist with the technology selection, design, start-up, and operation be engaged. We therefore propose that a joint steering committee be struck to initiate discussion out of which specific tasks will be generated.

The following is a point by point response to the CSE's proposal, that has been put forward as a set of pre-conditions..

1. Education Process

The requested education process for the CSE and other interested parties has been met through the Compost '90 workshop.

2. Pre-Consultation Process

The second request calls for a grant to be provided to the CSE to hire a consultant to:

(1) Advise them on the ability of compost plants to deal with odour and vermin;
(2) Contact people living near plants to determine their experience; and
(3) Catalogue the existing technologies for composting and nuisance prevention.

In response to this point, we feel that the Compost '90 workshop has addressed the first and third points, by exhibiting many examples of composting projects that have been run without major odour and vermin problems and by exhibiting the range of technologies that can be applied. This is not to say that additional research and eventually site specific research will not be needed. The second point, concerning contact with people living near operating plants, would be a valuable research tool and should be one of the first action items the joint steering committee should undertake.

3. Public Consultation

We support the CSE's contention for the need of a public consultation process with the larger community including:

(1) Provision of informational workshops for the public;
(2) Direct consultation with community institutions; and
(3) Direct consultation meetings with the general public in the Eastern Health Area.

We also concur that modifications in the proposal will likely be forthcoming from the public that will lead to changes in the proposal. We also concur that if there is general public rejection at this stage of the project's development then it will not proceed.

4. Independent Review

Point 4 in the CSE proposal calls for an independent review of any unilateral technical proposal by Metro. We do not anticipate conditions arising which would bring about such an action. In keeping with the premise of a joint steering committee, any technical work should be directed by both parties. This may include the technical work done by a consultant not yet retained by the Works Department and who would be selected by both parties.

5. Community Input On Design

In keeping with the need for initial public consultation on the project, we concur that ongoing public consultation is needed, particularly to review the final design of the facility.

6. Ongoing Community Participation

The sixth point has two components to it. The first concerns the potential inability of the plant to function within set operating parameters and the need for a mechanism to shut it down if this occurs. Our response is that we would not continue to operate a plant that was chronically failing to meet operating parameters, nor would the Ministry of the Environment, acting as the regulator permit such operation.

The second item proposes the establishment of a permanent community liaison committee to ensure ongoing dialogue with the community and the facility's management, including the identification of problems. We support this proposal in principle and agree that such a committee should have access to plant operating records.

7. Funding

The facilitation of the community consultation process will be assisted by a member of our public participation unit operating with the CSE. In order to conduct a comprehensive public consultation process, it is likely that short-term staff will be needed to assist with this process. We feel this matter and the proposal for a permanent community consultation officer are best discussed by the steering committee.

8. Community Benefits

Under Point 8 the CSE has proposed that serious attention must be paid to the hiring of local people in order to ease transportation problems and provide an incentive to the community to give the proposal serious consideration. While proximity to the location of the plant may have a bearing on a hiring committee, the stated hiring policies of Metropolitan Toronto must abide in all hiring practices.

9. Other Conditions

Two additional points are set out in the proposal but are not arranged under a numerical heading. The first is the participation of a labour representative on the joint steering committee and then on the permanent liaison committee. We agree that this would be a beneficial addition. We propose that a member of the labour force who could potentially work at the plant be nominated to the steering committee.

The second point is the CSE's position that the composting proposal should not be a contribution to the Solid Waste Environmental Assessment Process (S.W.E.A.P.). Under our current development plans all waste management facilities comprise a component of the Master Plan. However, under current Ministry of the Environment criteria covering application of the Environmental Assessment Act to waste management activities, compost plants will not require Environmental Assessment approval if their resides going to disposal are less than 200 tonnes per day. Our S.W.E.A.P. siting process for compost plants is being conducted on the assumption that we must be prepared for the possibility that any compost plant we propose could be "bumped up" to an Environment Assessment Hearing due to community opposition. If the cooperative siting process in which we are engaged with the CSE is successful, we will have community support for any proposed site in the neighbourhood and such a "bump-up" will not occur.

It is possible that a community-supported agreement in which the Metropolitan Corporation proposes a compost plant on a site with a smaller buffer zone than that recommended in our proposed S.W.E.A.P. siting criteria for compost facilities could be interpreted as undermining those criteria. For this reason it is our intention to inform the CSE that the corporation's continued participation in this siting process depends on their agreement that their proposal constitutes a recommendation to our S.W.E.A.P. consultants that the criteria for siting of compost facilities be amended to allow for the consideration of smaller sites which are specifically proposed by community groups and which are supported by the residents living near any such site.

We look forward to forming a joint (community/Metro-based) South Riverdale Compost Steering Committee to work together to contribute to our new waste management system. We feel that sufficient common ground exists to initiate the process and then work out on a consensus basis any outstanding items.

Community based support for composting and material recovery plants can be a valuable part of our total waste management strategy. However, we must recognize one possible issue. There is the potential for odour during composting and therefore a need for sufficient buffer zones to mitigate odours, which at least in the past have been associated with some of these plants. We hope that developing technology will improve odour control in the future and eliminate them.

R.G. Ferguson, P. Eng.
Commissioner of Works

Encl:

LJO/DB/al/swm